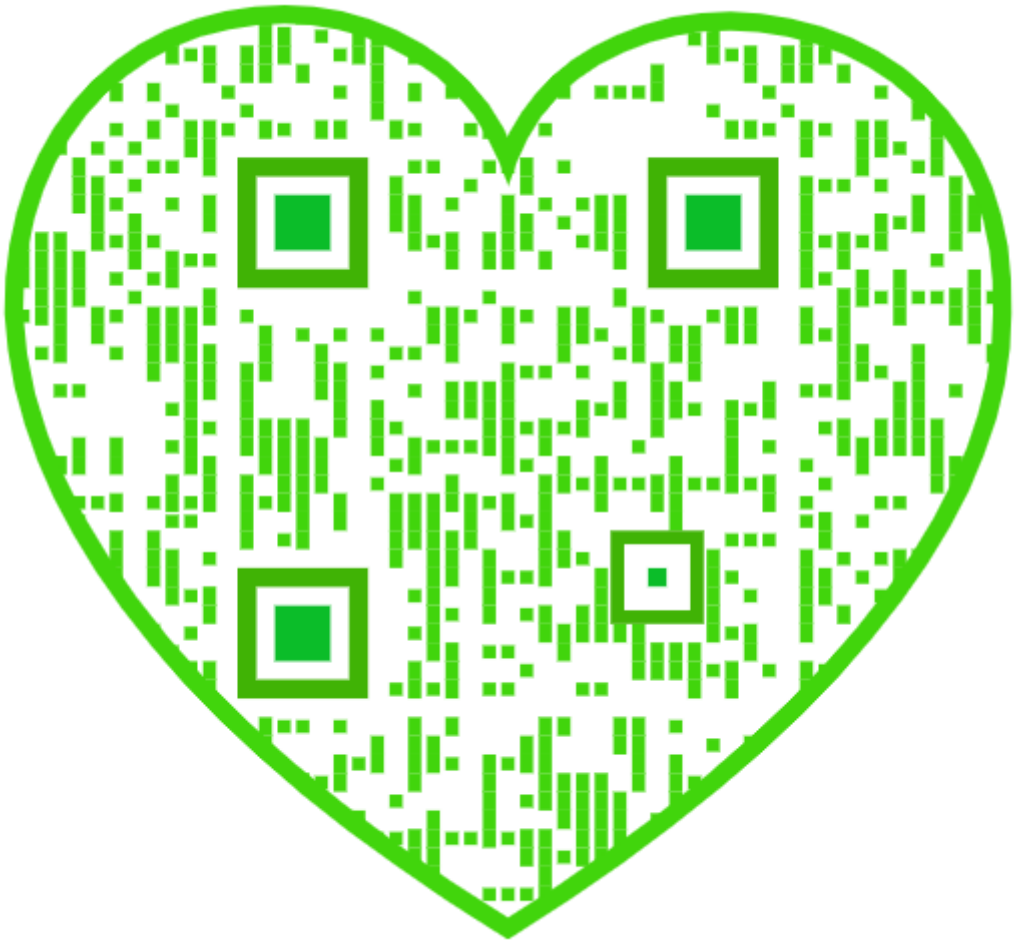

EVERYDAY PEDAGOGY

WITH SPECIAL APPLICATION TO THE RURAL SCHOOL

BY

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FARMINGTON, MAINE

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PREFACE

No claim is made that the ideas here set forth are new. The best of them are very old. Some of them are told more than once in this book, but those are the ones it has been found necessary to tell many times to student teachers. The material is in part oversimple, and in part, perhaps, overelaborated. It has been made so purposely. In those things that might be called faults lies the merit of the work, if it has any merit. The plans herein given are practical not theoretical, most of them having been tried in our own school and gathered through close association with many teachers. They are stated in the way which has seemed to meet the needs of young teachers in everyday work.

Not all the books and other material, nor all the ideas, are supposed to be used by any one person. Enough has been suggested to leave freedom for choice. In cases of doubt, application has been made to the rural school, though most of the suggestions will serve as well for any other school.

Repeated requests for information along these lines and a long-continued service in connection with young teachers in training classes and institutes have furnished the occasion for the making of the book. It is hoped that the volume may be of practical value.

The writer wishes to take this opportunity to express her indebtedness and gratitude to Payson Smith, LL.D., Litt.D., Superintendent of the Public Schools of Maine. His kindly assistance and encouragement have been unfailing. His corrections, suggestions, and additions, made in connection with the reading of the manuscript, have added much to its practical value.

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INTRODUCTION

It is trite to say that the success of a school system is to be measured in terms of the efficiency of the teaching force.

Yet, in a day when the emphasis on system and machinery is great, it is worth while to reiterate that plans, policies, and theories for the improvement of education are effective only in the degree that they find expression in the life of the individual school and that this expression must come by means of the individual teacher.

To make the teacher more efficient is to make the school better, hence improvement of the teacher remains the important function of the educational machinery we establish.

Much stress is laid, in the work of teacher improvement, on the need of the widest possible knowledge on the part of the teacher of the principles underlying successful instruction and school management. Happily there is no longer any serious discussion of the desirability of this knowledge. One may as well admit, however, that general information in regard to the theories of education is not of itself a guaranty of effective teaching. Unless these theories find concrete expression in daily practice, the knowledge of them is quite without value.

It happens not infrequently that teachers — and especially beginning teachers — find themselves embarrassed in

a wealth of theory. How to summon to their aid in a crisis of the day's work just the principle the occasion requires constitutes an educational problem by itself.

Admitting, then, the very important place of the schoolroom teacher in making the school system effective, and emphasizing the necessity of a sound basis in educational theory for schoolroom procedure, we find there must be a large place for those who — whether by book, lecture, or sermon — shall aid teachers to interpret their theories into sane educational practices. Progress in the making of better schools will be less halting and hesitating, will be less disturbed by unnecessary repetitions of experiments and by much traveling of bypaths with profitless ends, as teachers find ways of coming in contact with the experiences of other teachers and especially those whose business it has been to test daily in the crucible of experience the freshly wrought theory.

This book, reflecting a thorough study of schoolroom needs on the one hand and of carefully tested theory on the other, with their constant application, cannot fail to bring to any teacher that satisfying inspiration which results from the worthy accomplishment it will help to bring. Especially to those thousands of teachers, who, in rural and other small schools, must rely so considerably upon their own resources its pages will bring constant help.

PAYSON SMITH

AUGUSTA, MAINE

EVERYDAY PEDAGOGY

CHAPTER I

THE TEACHER

Preparation for the work. There are certain things in the way of preparation that will soon be absolutely demanded of the young person who wishes to teach. Even now, every one who plans to be a teacher, if only for a little while, should demand of herself that she have the equivalent of a good high-school course followed by normal-school training. This, at least, is essential if she is not to waste much precious material in unwise experimentation. She may indeed, by direct school practice and careful observation, gain skill in her calling without this, but she will always be hampered, as is one who picks up a trade, by lack of knowledge of the best ways of going about things. She will waste time, energy, and material, and will fall short of what her success might have been if she had been well prepared for her work.

School training not sufficient. The high-school and normal courses should form the foundation upon which a young teacher should build her power. They should be supplemented continuously by reading, both general and particular; by travel, though one may be a good teacher without having gone to Europe; by school visiting; and

by attendance at teachers' meetings and conventions. If teaching becomes a life work, there may come a time when a convention, a school-visiting day, or an educational book may bring only one or two new ideas, but a single idea is worth working for at that point, and the stimulus of such things is of more value than can be counted. Many teachers feel that when once they are graduated from normal school or college and placed in a school, no further work is necessary. Such teachers, somewhat undesirable to start with, grow more so with every additional year of service.

Personal appearance. A teacher's personal appearance is also of moment. She may not be beautiful, but she should look beautiful to the children — a thing surprisingly easy to accomplish if one goes about it with intention. The first essential is good health, which may usually be attained by proper attention to food, exercise, rest, and sleep. A teacher should not remain in a boarding place in which the food is insufficient or unpalatable, either to save a few pennies or to spare her landlady's feelings. She should not make her chief articles of diet candy and pickles, nor serve herself continuous lunches through the evening. She should not omit her out-of-door exercise because of the miles walked in school, nor her rest on account of uncorrected papers, nor her sleep because of school worry or social dissipation.

Dressing properly also helps to preserve good health and has undoubted effect in production of beauty. Too thin clothing in cold weather causes great waste of energy in keeping warm. If the room is right for study, one ought not to be uncomfortable in reasonably warm clothing. The teacher who goes to and from school and to the

playground at recess with no greater protection against cold and damp than that given by the regular indoor dress is not only endangering her own health, but is setting a poor example to the children. Again, school dress should be suitable for school. The schoolroom is not the place for wearing out one's old silk dresses. It is not necessary for a teacher to have many or expensive clothes, but those she does have should be appropriate to the occasion. Children like change, so the element should be furnished, not usually by many different dresses, but by the collar, ribbon, or bit of embroidered tie, that will delight the eyes of the little people and not take much from the teacher's scanty funds. By her own scrupulous care of hair, teeth, and nails the teacher should stimulate the desire for personal daintiness in her pupils.

A child's admiration for his teacher is a great help in discipline. Children are always delighted to tell of their *pretty* teacher. Mothers are invited to come to school to see how attractive she is. One mother was invited to come in the afternoon, because the teacher's hair seemed to curl best then. It is no uncommon thing for children to raise hands and ask the teacher to come to them for a minute, while they confide admiration for dress or ring or touch of beauty. It pays to make one's self look well to the school.

Of even more importance are manner and speech. If a phonograph could be set up secretly in our schoolrooms, and we could hear at night all we have said during the day, repeated with the monotonous tone, or the irritation, or the whine, which are so often there, many of us would not sleep so easily. If we had these remarks to analyze and parse, our remorse would often be still greater, and we

should cease to wonder that the children's language lessons do so little for them. A teacher should be as polite to her pupils as she requires them to be to her. Her every word and deed should suggest the courtesy that she wishes to teach. Too often, in demanding obedience and politeness in the schoolroom, the teacher uses tones, and even words, that would not be tolerated elsewhere.

Position in the community. A teacher's personality counts for much in a community. Sweet temper, sympathy, an interested and animated attitude toward life in general and school life in particular, tact, common sense, a willingness to take hold and help whenever help is needed, a sturdy dignity when dignity is desirable — all these will go far to aid the teacher in making and holding a right place for herself in the schoolroom and in the children's homes. She is in a position to be of much service to the young people of the neighborhood. A little girl once said to her mother in regard to the teacher: "I love her, mamma. I touch her dress as she goes by." "Does she know it?" asked the mother. "Oh, no; but I love her so, I like to touch her." Another child bent in humble adoration and kissed the teacher's hand as she stood by his desk a moment during a recitation. These things being so, how can a teacher lower herself to lend the force of her example toward making slang the regular language of the boys and girls, or to associate with them on any but the highest plane! A complaint was once made concerning a teacher that through her one of the pupils made her first acquaintance with the question of beaus, the teacher having spent her time in the discussion of no other subject when in the girl's company.

A teacher should not enter in any way into the neighborhood quarrels that in many places exist perennially and do their worst toward lowering the community spirit and ideals. She should identify herself with the life of the people with whom she is working, call upon them, attend their social gatherings, and mingle with them freely, but she should not forget that her business is to teach school, that her position tends to make her an example, that her life should be lived worthily, and that she must keep herself above reproach. If she is musical, she should be willing to help out in that line, but she should not sacrifice her regular work for it. If she dances or plays cards, she may do both in moderation, unless the community as a whole objects to these amusements. She should be sure that she permits attentions only from young men of good standing, and then only to a reasonable extent. In many communities teachers receive eagerly the attentions of young men who are looked down upon in the neighborhood. Any teacher who knows all the men in the place in a few weeks, or who is the subject of conversation in stores or on street corners, is doing herself, her school, and her profession a serious injury. If the community as a whole does not respect her, she might much better give up her school and go home before further mischief is done. Even with every intention of doing right a teacher often finds herself too deeply involved socially to be at her best for school work. In general, Friday and Saturday evenings may be given to amusement, but the others should usually be employed in finishing the work of the day, preparing for the morrow, reading, resting, and such occupations.

Attitude toward school officers. The attitude of the teacher toward her superintendent, her principal, or her associate teachers, if there are such, should be cordial and friendly. She should be open to suggestion and should give her opinions when they are desired, but should not force them into notice. She may not always agree with her superintendent, but she should remember that he is in authority and is usually aiming at the same result that she is — the good of the school. He may have ideas with which she so disagrees as to make the position difficult for her, but while she stays she should be subordinate to his direction. It is well for a teacher to talk over school conditions freely and to ask for things needed for the work, but she should not at every meeting with the superintendent overwhelm him with complaints, with demands for working material or for help in discipline, or with requests for an increase in salary.

The teacher makes the school. This first chapter is given to the teacher, because she is the important thing in any school. The room may be unpleasant and poorly equipped, the books worn and out of date, the neighborhood undesirable, the school officers difficult in many ways, and still the school may be of value; but if the teacher is not right, the term can never be profitable. A teacher should take to her school every possible aid, but she herself must be the greatest thing of all. She must have the spirit of the mother and the missionary, and this will usually supply her with ways and means to conquer the situation.

CHAPTER II

THE TEACHER'S EQUIPMENT

Why needed. A wise teacher, disregarding the fact that school authorities are supposed to furnish all things needful for school work, equips herself with many small necessities, to tide her over waiting times and to supplement supplies. It is right that a superintendent should be asked to furnish what is needed, and a teacher is rarely ranked the higher for asking little; yet through indifference of authorities, lack of funds, or other causes, a school is often hampered in its work unless the teacher fills the gap and provides that which it may not be her place to provide, but which it is hard to do without.

The equipment box. Every teacher should secure a large wooden box having a cover, hinged if possible, that may be screwed down, and provided with a padlock or other fastening. It should also be fitted with rope handles, that it may be shipped as baggage. This box should be the home of her school equipment and should be kept at the school building. The advantage of the box is that if one takes the material in a trunk, one gets along with little, and that little must be conveyed to school bit by bit. The equipment should include the following things at least, with such others as may occur to the teacher.

Books. A teacher's collection should contain educational books and books meant for relaxation. The educational

books include those intended for the teacher only and those to be used by her and the children. Every teacher should have a library, and every teacher should have at hand what may serve as a library for the children. The books best suited for the purpose are usually those to be obtained from the firms that publish schoolbooks. Most of them are inexpensive. The teacher may acquaint herself with them through the samples displayed at teachers' conventions, and to a certain extent by the study of publishers' catalogues. Dealers will usually be willing to send books to be looked over; these may be retained if they prove to be what is desired, the money and the remaining books being returned at once. A teacher should aim to start a permanent school library immediately, if she does not find one established, but it will take time to acquire a library of any size, and in the meantime the books that go in the teacher's box will have to serve. As has been said, most of them are cheap. They may be purchased a few at a time, — as few as must be each term, — but their value in saving time and friction, furnishing spice for the regular lessons, and establishing a bond of sympathy between teacher and pupils will make them worth considerable sacrifice on the part of the teacher. It was said in the last chapter that the teacher should have the spirit of the mother and the missionary, and the missionary who has formed the taste of a child community for the right kind of books has performed a saving service to mankind. The children should be welcome to use the books from the teacher's outfit in preparing their lessons, for filling in spare minutes otherwise wasted, and for entertainment at noon and before school, and should be allowed to take them home when they wish. The parents

often get as much from the books as the children do. "Papa and I were talking of Damon and Pythias," said a seventh-grade boy to his teacher. "Would you let me take home your 'Stories of the Greeks' for a day or two, so we can read it again together?" "As long as you please," said the teacher, and the book stayed a fortnight, and both father and son were pretty well up in Greek history when it came back. Even where there is a public library the teacher's books are often preferred, partly because failure of memory does not mean a fine, and partly from a feeling that the books are a little more desirable.

It is somewhat difficult to enumerate the books best fitted for the box, but many of them are of the supplementary-reader kind. A list of such is included in the chapter on Apparatus. There are countless books suited to the need. Sixty cents is the highest price I recall for any of the more usual ones. Many do not cost half of that. They may all be read by the children with delight. The box, starting with three or four of them, may grow as fast as possible to include many.

The other class of books under the educational head includes those helpful in getting lessons. Every teacher has a few arithmetics, language books, or other common textbooks. These should be taken along, as they may prove useful. There should be also books of special helps for different subjects, at least one for each subject. Many of these are suggested in the lists at the ends of the chapters. They may be accumulated gradually, starting with the one of which the greatest need is felt, but a teacher should never rest until she owns them all. Back numbers of educational magazines should go along to

supplement the one that will be received each month. These may be reduced in bulk if the teacher chooses to go over the numbers and select the articles she finds most useful, making them into a scrapbook collection such as is spoken of later.

Besides the material mentioned there should be books of poems and any book which the teacher may have that will furnish rest and relaxation — general reading matter, to serve if no libraries are at hand.

Pictures. Almost as important as the books that go into the box are the pictures. We are awaking to the work done by pictures in the training of communities. All the magazines are recognizing this, and we find them vying with each other in the beauty and abundance of their illustrations. It is quite possible to keep well informed on most subjects of general interest through a study of the illustrations of various articles, without doing much reading of the articles themselves. Advertisers content themselves with a striking picture and a few words and do not fail to reach the public. Schoolbooks are equipped with beautiful and truthful illustrations at enormous cost, and the publishers find themselves paid for the outlay. The children study the pictures with delight, but it is surprising how indifferent the teachers often are to the need of making the illustrations of greater value by a judicious use of them. Many teachers never use intentionally even the pictures furnished them in the books. The child does profit by them, but the profit may easily be doubled. Nor is it sufficient to use only those in the book. Indeed, pictures shut up in books are difficult to handle for class work, as one has to spend too much time in getting at

them and they cannot be put up to be gazed at for as long as is needed. So a teacher should have an abundance of pictures in her equipment box. The manner of getting and using them is discussed at length in the chapter on Apparatus.

Illustrative articles. Every odd nook and corner of the equipment box should be filled with illustrative material. If the teacher has any real curios, so much the better, but it is not necessary that this material be either odd or valuable; the little things that one might pick up anywhere may find a place in the collection — a bit of iron plate or wire, or any small metal object; a little lump of each of the different kinds of coal; a piece of quartz, marble, or slate; a bit of ivory, or bamboo, or rattan; a few pretty shells; a box of mixed spices; the dried, clean backbone of a fish; samples of various breakfast foods and of the different grains — anything, everything, that may serve to brighten and make clearer the lessons of any day.

Many teachers fail to realize what such things mean to children, but when a teacher has once fallen into the habit of using them, she thereafter knows their value and saves greater and greater space in the box for them. Teachers have seen the objects many times, so at first they seem common, valueless. The child has seen them less often, has usually failed to make connections between them and his school work, and is in the perceptive state, when everything that appeals to the senses is very dear to him. Description may serve in many cases for older people, but children need to see the things. The simplest object may serve many, many times. A few years ago the toy shops contained dolls made to represent different races;

one teacher gathered in a number of these, and their appearance was always greeted with as much delight as if they were being seen for the first time.

Besides the little odds and ends that cost nothing, the judicious expenditure of ten cents or a quarter here and there will in time produce a really good collection. If a teacher keeps her eyes open, and if she prefers her collection to ice cream and certain forms of entertainment, the increase is rapid and the product becomes worth while. Besides serving for illustration, the collection grows to be a great aid in the drawing work. Little vases, kitchen utensils, toys, and the like reach out beckoning hands at every turn.

Material for desk work. The teacher's equipment should contain material for desk work for the little children. The most important of all is the hectograph, without which no teacher should feel herself able to exist. Then there should be colored papers, sometimes called oak tag; outlived calendars, the larger the better; colored sticks; tiny pictures cut from advertisements; and other like aids. The way in which these should be used will be indicated under the head of "Desk Work."

Material for industrial work. Industrial material is a valuable addition to the contents of the school box, and the teacher will easily find at home many things which will prove useful in this line. They may include bits of ribbon, velvet, silk, muslin, linen, and flannel; pieces of denim, silkaline, cretonne, and cheesecloth; balls of bright wool, remnants of silkateen or embroidery silk, empty spools, and bits of wall paper, bright-colored papers, and cardboard; knitting needles, tape needles, bonnet wire, and

twine. Anything which may serve as a help in the various lines of work suggested in the chapter on manual training should be saved to go into the big box.

Emergency helps. It is well to put in also a box of material that will be useful in case of sickness or accidents. A roll of old soft linen, which should be kept immaculately clean, a roll of absorbent cotton, a few fine needles, a little court-plaster, small bottles of camphor, peppermint, peroxide of hydrogen, aromatic spirits of ammonia, and creolin or sulpho-naphthol are the most useful.

Miscellaneous articles. Lastly, the box may hold a little paper of the kind known as arithmetic paper, a little manila language paper and manila drawing paper, a dozen or so of cedar pencils, a few pens, a tape measure, a yardstick, a foot ruler, a few colored pencils, colored crayons, and a box or two of cheap paints. These are to fill in the gaps when the regular school supplies give out; periods of being "hung up" come in every school.

It is quite possible to get along without the school equipment box, or without any of the articles mentioned, but the teacher will be happier and her work will be far more effective with it, and the results accruing will more than make it pay in the long run. Starting humbly, the collection will grow to large proportions, and such a box, well started, is an eloquent prophet of future achievements, of promotions, and of good service generally. No teacher who has prepared herself for the meeting of school emergencies will allow herself to drift into the attitude of trusting to chance. She may be depended upon to meet situations and conquer obstacles.

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CHAPTER III

THE SCHOOL BUILDING AND GROUNDS

Cleanliness. The first requisite for the school building is cleanliness. A schoolroom may be roughly constructed, unadorned, uncomfortable, inconvenient, but there is little reason for its being dirty. If a teacher finds it so, she should see that it is made clean. Of course, it is the janitor's business to see to this work, but if he does not do his work properly, the teacher should look after it herself, till the time when she may be able to bring about an improvement in the janitor service. A teacher often feels it beneath her dignity to do any work of this sort, but it demands a greater sacrifice of dignity to live in dirt than to scrub a bit.

If the room is found littered and dusty, the teacher should sweep and dust it. If it is otherwise unsightly, she may organize the children into a brigade for cleaning. This may well be done on the first Saturday, or, if that proves difficult, the work may be done a little at a time after school. Everything that can be improved by soap and water should be looked after. The scrubbing should include chairs and desks, though if these are varnished, soap should not be used in the cleaning. Children may scrape or sandpaper desks and afterwards shellack them, but the work must be carefully superintended. Sandpaper is an efficient aid in removing ink stains from the floor. If the

walls and ceiling are smoked and discolored, it sometimes has to be borne, but a pail of whitewash may be obtained, or a particularly earnest and fascinating teacher may be able to secure from the school authorities paint enough to cover the surface, if she will get it applied. Often it is the labor more than the materials that it is difficult to obtain from the school board. Paint is better than paper or whitewash because the walls can afterwards be washed, but it is more expensive, of course.

Organizing for permanent improvement. It is always well for a teacher to organize some kind of club whose purpose shall be to improve the appearance of the schoolroom, building, and grounds. Such an organization may be made up of the teacher and pupils only, or it may be extended to include the parents and any members of the community who may be interested enough to wish to ally themselves with such a society. Often it will prove a strong bond to unite teacher and children, and it will usually tend to produce a better feeling in regard to school property, which will result in improvement, additions, and more careful use.

Bookcase, school cabinet, and other furniture. When the room has been cleaned, the teacher should look over her resources and proceed to make the most of them. She will probably find a small bookcase containing the school supply of books. It should be her aim to make this grow to a large one and to create a companion piece that shall serve as a school cabinet. Teachers who are receiving present-day training ought to know how to construct, from boxes, something that may be used for a cabinet till a better one can be obtained. If a tall box is

stood on end and fitted with shelves, and a door is made from the cover, we have a good beginning. The box may then be stained any suitable color or covered with dark green or brown cartridge paper. Shelves for books or for display of work may be made in the same simple way and placed wherever an opportunity is given by an unoccupied corner or small piece of wall space. A good table for many purposes may be made by standing a small box on end and nailing the cover of a large box to it, the small box serving for the foundation, the large cover for the top. By such means many articles of furniture may be obtained which will have a special value in the eyes of teacher and children.

Blackboards. There will be a certain amount of blackboard space. If the board is in bad condition, it may be bettered by the application of blackboard slating, which comes in small cans and may be put on easily with a brush. If the board space is too small, it may be supplemented by use of blackboard cloth or brown paper. Either of these materials may be used for making maps.

Decoration of room by pictures. A clean room is in a measure beautiful, but the room in which teacher and children are to live day after day should be more than clean. It should be adorned. There should be several pictures — not so many that the beauty of any one is lost, not of necessity expensive, but each really good and artistic. It is possible to find copies of many masterpieces unframed and mounted on gray paper. Though it is nicer to have framed pictures, the unframed ones or those framed with a passepartout binding may serve at first. It would be well for the teacher to have a few in the big box. These she may use till they are no longer needed, or, if they are the only

ones she finds it possible to get, she may well leave all or a part of them when she passes on to the next school. One teacher, by the expenditure of a dollar, got several such pictures, put them on the wall with brass-headed tacks, and was surrounded all the while by admiring children. The pictures included the Sistine Madonna, the Madonna of the Chair, Murillo's Saint Anthony, the Saint Cecilia of Raphael, and other like subjects. These immediately took away the uninhabited aspect of the place and were a continual source of pleasure to the whole school.

Good framed pictures need not cost too much. There are some Prang colored prints which include Mother Goose subjects that are particularly pleasing to children and indeed to older people. These sell, mounted, for fifty cents each. Framed, they make large pictures, about 22 by 28 inches. It is better to order them unmounted and buy a sheet of gray mounting board for them, as the express or parcel-post charges greatly increase the cost. Unmounted, they may be rolled and sent by mail for a few cents. They should be ordered from The Prang Educational Co., New York. The Rhine Prints offered by Atkinson, Mentzer, and Grover are good and inexpensive. Prints not easily distinguished from high-priced ones, except after long service, may be obtained much more cheaply at the large department stores than elsewhere. A teacher visiting any large city would do well to look in such stores for them. There are also many good pictures to be purchased cheaply from The Perry Pictures Company and other like firms.

Sometimes a schoolroom may contain an unsuitable picture in a good frame and the teacher may make a substitution. Great care should be used in selecting. In choosing

pictures for a schoolroom, beauty should be made the first requisite. Good pictures of Washington, Lincoln, and Longfellow are suitable as subjects, but other portraits are not usually desirable, and a really beautiful picture is preferable even to these, though it is very fitting that a Washington school should have a picture of Washington. No picture at all is better than an ugly one, hanging before the school day after day, making its imprint of ugliness. The pictures should be hung close to the top of the blackboard, not six inches above it, though I am aware that I may offend some art critics in this matter. The ordinary schoolroom arrangements always make pictures hang too high to be seen well by the children, and long observation has convinced me that the height is more to be considered than the space.

Many schoolrooms have been decorated by means of the ever-present "soap order," and since the soap order is bound to exist, it might as well be of service here. Entertainments will often prove a source of revenue.

Other decorations. Not only may the schoolroom be adorned with pictures, but often bits of the children's work may be arranged around the walls — bright-colored paper chains and those made from kindergarten straws and small circles of colored papers arranged alternately, pretty cuttings, nicely woven mats, strings of berries or seeds. Festoons of green are suitable at Christmas time, strings of pop corn and cranberries at Thanksgiving, and bunting or crêpe paper on patriotic holidays. None of these should stay up too long — not long enough to be dust traps or to become tiresome. They serve as a change and to awaken an appropriate response to seasonable suggestions.

Plants. Plants are invaluable if the room is heated so they will not freeze. If there is not continuous heat in the schoolroom, they may be kept there in the fall and spring, and some of the children may take them home during the coldest weather.

An aquarium, containing a few water plants and any form of animal life, is a pleasing addition to the schoolroom.

Flowers. There should be flowers about the room in the flower season. The children will bring them in abundance, in regulation children's bunches — a little of everything. Many teachers put them into dishes without regard to the principles of harmony or of flower arrangement that they have been taught and are now supposed to be teaching to their pupils. It is often difficult to know how to avoid hurting the children's feelings and yet have artistic groups of flowers. One of the best ways is to have a large bowl or pan into which are put all unarranged flowers. Out of this they may be taken as desired. Some are never taken. As they are not thrown away, no child has occasion to be grieved. His flowers may be the next to come, and at any rate they are there in the room.

The teacher may arrange the flowers herself or it may be a general exercise in which the fitness of the different flowers for each other's company may be discussed and a selection made. It should be remembered that it is much better to save a child's feelings of right and kindness than to elevate his artistic taste, but he may easily be trained to right ideas of beauty. He should know that too many flowers should not be grouped together, that they should have different lengths of stem, that they should be of one kind or of kinds that seem to belong together, and that

there should be plenty of green. Sometimes it is possible to purchase a few vases for the school at small cost. Vases of clear glass or those green in color usually harmonize best with the flowers. If this cannot be done, one may use olive or pickle bottles, since these are of convenient size and are often artistic in shape. All labels should be removed, and the bottles should be clean. The vases of flowers should be placed where they will look best in the room, not crowded several in a group or set up in rows. As soon as the flowers can by any stretch of imagination be called faded, they should be thrown away.

"The shrine of beauty." The suggestion has been made by some teacher of art that in every schoolroom there should be a small shelf, in a corner or other convenient place, which should be considered a "shrine of beauty." On this should be displayed each day some truly beautiful article. It might be a vase of flowers or a vase alone, a shell, a leaf, or some simple, well-proportioned manufactured article. It was maintained that such a shrine might do much toward developing the æsthetic sense of the children.

Blackboard decorations. Borders made with colored crayons, or a calendar with a spray of flowers or leaves behind it, will add to the beauty of the room. The decoration may well be simple, and a teacher will quickly grow in power to produce a good one. Care should be taken to avoid crude coloring; gray or violet crayon or crayon of the necessary complementary color will be found useful in softening the effects. Children are not critical, but glaring reds, blues, or yellows in a board decoration are not pleasing. It is not always necessary to finish a drawing at one

time. The teacher should work long enough to make it as good as possible. Artistic children may sometimes help.

A curtain of dull green or some other soft color should have a place, and upon it should be put the children's good work, or it may be used for display of the pictures before referred to. Other pictures may stand on the chalk rail. Some teachers stretch a length of black mosquito netting over a board. The pictures may be fastened to this, the netting not showing at all against the black surface of the board.

Orderliness. When the room has been arranged with attention to as many as possible of the above suggestions, it should be kept in good order. This calls for constant care from both teacher and pupils. It is well to have the children formed into certain committees who shall care for particular things. The officers may be changed from time to time. All litter should be disposed of at once. Children should not be allowed to tear waste paper into bits or crumple it into a ball. It should be folded up and laid on the desk till collected for the waste basket. Many teachers encourage the use of a small cloth bag hung beneath each child's desk. Whatever is done with the waste paper, the teacher should inspect it carefully before it is burned, though this inspection should not be made noticeable. Examination of this kind brings to light much needless waste and often silly or improper notes, which should be traced to their source and the source purified as far as possible. No litter should be allowed in the aisles, the books and other material should be arranged neatly in the desks, and, above all, the teacher's desk should present a model. It takes only a minute to put things away as they are used,

but if a teacher's desk is not cleared up during the day, the result is distressing and astonishing.

Things out of place constitute disorder, and hats, coats, mittens, and rubbers have no business to be strewn around the room. The wraps should be hung upon the proper hooks; the rubbers should stand beneath them side by side, heels to the wall, as they look more anchored so. Many teachers make use of snap clothespins having the child's name. These hold the two rubbers together. Mittens may be put under a stove or upon a steam pipe to dry, but when dry they should be put in the proper place. Lunch boxes should have a particular place and be kept there. Tin cans, decayed fruits, withered flowers, and such things do not add to the beauty of a schoolroom.

The blackboards should be cleaned carefully with an eraser, after each lesson in which they are used. At recesses, at noon, and at night they should be wiped with a piece of soft cloth. The teacher should include an abundance of this in her packing box. The boards should be washed with clear water when necessary, though too much washing is not good for them. Hard rubbing is often better, and a board may be almost perfectly cleaned by rubbing carefully with a cloth that is damp, not wet. Erasers should be clean. They may be washed by dipping them in water and rubbing them together vigorously, afterwards rinsing thoroughly. Chalk dust should not be left scattered on chalk rails for any length of time, and it is better usually to keep the chalk in a box than on the rail. A clean blackboard is an ornament to any schoolroom, and a blackboard adorned with good writing is still better to look upon, but no schoolroom can be attractive if the boards are covered

with scrawls of writing or half-erased examples. A teacher is often judged solely by the appearance of her boards.

Outbuildings. The outbuildings should be looked after carefully. It should be the business of the school authorities to see that they are in a condition of decency at the beginning of the term, and that of the teacher to see that they are kept so. After the teacher who finds them in bad condition has done her best to improve them, her voice should be heard early and often till they are put right. Indecent inscriptions or pictures should be effaced by some means. A daily, yes, a semidaily, inspection should be made, and the children should be trained as rapidly as possible toward a state of disgust for anything of the sort.

The school yard. The school yard should contain a pile of sand in which the children may play at recess and where many of them may work out much illustrative work in connection with their lessons. The yard should be raked and cleared up generally. An effort should be made to plant trees if they are lacking. A flower garden should be started, shrubs introduced, and vines planted around schoolhouse and outbuildings. A few years of care may change a barren waste into a place of beauty, and morning-glories, nasturtiums, hop vines, and Virginia creeper may make quite a stride toward it in one season.

REFERENCES

Brown pictures. G. P. Brown, Beverly, Mass.
KERN. Among Country Schools. Ginn and Company.
MEIER. School and Home Gardens. Ginn and Company.
Perry pictures. The Perry Pictures Company.
Prang colored prints. The Prang Educational Company.
Rhine prints. Atkinson, Mentzer, and Company.

CHAPTER IV

APPARATUS — ITS SOURCES, CARE, AND USE

Need of tools. Though scanty material often develops a saving turn of mind, though a skilled workman may make his own tools or improve upon the inferior ones furnished him, yet it is true in general that no good work in any line can be done if material and tools are lacking. In school work, books and other tools and supplies of various kinds are needed. They should be accumulated with eagerness yet with caution in selection, handled with utmost care, and made use of in such a way as to be productive of best results in shortest time, with least wear and tear.

Economy of school material. The children should be taught economy regarding all school material. Books, pencils, paper, pens, chalk, everything of the sort, should be kept in mind by the teacher, and all waste rigidly suppressed. Children often feel that things which are the property of the town never have to be paid for by anybody, and that no care of them is necessary. A little talk on the principles of taxation would clear up this idea. Teachers themselves are often so careless in this respect as to be positively dishonest, feeling no compunction in using school supplies for private consumption at home and taking permanent possession of textbooks whenever they wish — a proceeding which is nothing more nor less than stealing. Often teachers are wasteful of supplies, using

large amounts of material when small would do as well. My own observation is that nine out of every ten young teachers, if they were to have a class cut circles an inch in diameter out of four-inch squares of any material, would have each child place the circle exactly in the middle of the square, and never give a thought to the resulting waste.

Care of books. A teacher should be as careful of each book as if it were her own and absolutely new. I have seen teachers fresh from the sharpening of many lead pencils, with fingers black from contact with the lead, fall calmly to study of lessons or to looking up some disputed point without even wiping the hands. A record should be made of all books given to children, so that the teacher may know whom to hold responsible. Early in the term the books should be inspected and their condition learned. All marks should be erased. Any needed mending should be done. Much use may be made of adhesive transparent tape, adhesive cloth, and loose-leaf binders. The books should be covered and the child's name put upon the cover. There should be frequent inspection during the term and a thorough taking account of stock and repairing at the close. Each child should feel the need of care of his books and that the teacher will know what happens to them. Being made to bring a cent has given many a little child a large start in the right direction, particularly if parents were wise enough to make him earn the cent.

Children should be taught *how* books may be abused. They should never be bent too far open, never marked unreasonably, never turned down or chewed at corners, never packed too closely on the shelves. Covers too tightly put on loosen bindings; so does a fall. A large book

dropped is seldom as good afterwards, so neither teacher nor children should carry about too many at a time or pile too many upon a desk.

Fewer books than usual should be kept in desks. This will insure better care, more frequent inspection, better proportioned study time, less noise, less loss of time in repacking. Certain books may well be kept in the desks, but many of the others may be kept in the bookcase or in neat piles on some unused desks and distributed when needed. Older children may generally have most of their books under their own care. Readers are often too tempting to be kept in desks, and any child who makes a hobby of a particular subject is not to be trusted with the entire care of the book relating to it. If children are allowed to take books home, they should be cautioned against laying them on ground or doorsteps, getting them wet, or leaving them at home or at other places where they will not be ready for work next day.

Distribution of apparatus. Children should be trained to help distribute books and all other material. It should be done in such a way as to save time and disorder. Books should usually be given and taken by rows and put into the case in proper order, one child doing the work for the row. Sometimes papers and light material may be handed in bunches to the children at the front desks, who may each take a piece and pass the bunch to the child behind him. Collection may be made in the same way. When many things are to be given for one lesson, as, for example, in a drawing class, teacher and pupils may help in the work, the teacher passing the material slower of distribution and the children the rest. Often everything needed

for a painting lesson may be put upon a large board and taken by the teacher down the aisles, children from four desks helping themselves to it at the same time.

It is not well for a teacher herself to distribute books or papers to a whole class one by one, nor yet for her to stand still and await the slower distribution of a single child. Training children so they understand just what to do and the best way of doing it saves much time and is a general help in discipline. Time taken in such training is not wasted, and if the teacher says, "All hold papers in the right hand," they should be held in that way if it takes the whole session to bring it about.

Tools should be ready. Pencils and other tools should be kept in readiness. Pencil sharpening should be under the supervision of the teacher and seldom done in school. I remember visiting a school in which ten minutes of school time were occupied in getting pencils ready, the children standing around the wastebasket, or waste heap, as it might have been called when the orgy was finished. The work might just as well have been done before school — the children were all there.

Pupils should understand that they must be responsible for being ready. If a child fails to get in readiness, he should sit idle and do his work at another time. This will soon quicken the memory and induce a feeling of responsibility. "I have forgotten my book" or "I have the wrong book" should produce a gentle expression of sympathy from the teacher, but usually no permission to make good the lack. Rarely then will such things be forgotten, and a general power to look out for things is worth more than having material at hand for a single lesson.

Acquisition of books. Many books are needed for use in even a small school. The teacher will have to furnish a part of them, as has been said, and their use will abundantly pay her for her sacrifice, but it is very desirable that a permanent school library be built up as soon as possible. The children may be asked to contribute books if they can do so. It should be impressed upon them that what is wanted is not merely entertaining stories, but something really worth while from a literary or other educational standpoint. The teacher's books will serve as a sample. The superintendent may be asked to furnish certain books for the library. Friends of teacher or school will often contribute, and a really valuable reference library has sometimes been built upon a foundation started by retaining one or two of the best of the old books of a set, when an exchange of books on any subject was made because the whole set was no longer to be used for classes. A book does not cease to be valuable because it is no longer the best for class use.

Another excellent way is to buy, for supplementary reading, a set of geography or history or other similar readers and to use them for regular readers for a year or so and then get another set of supplementary books, adding the first set to the reference library. Another way is to ask for a set of supplementary readers to be used for silent reading, the set to consist of one of as many kinds as there are members of the class. These may be read by all in turn and then added to the library. Such purchase of books would be far more economical than to buy so many of one kind, as is often done. An incentive to care for the books would be furnished if the children were interested in enlarging the library.

Books the most valuable tool. Books are the most general and valuable of the tools of any school. They should be used in such a way as to get the most out of them. The teacher should read them herself, and should refer the children to particular things in them. Pupils should be trained into a habit of expecting to get from books information regarding any subject, and any contributions to recitations which show research should be encouraged. The teacher should open lines of thought and then speak of certain books as being good along those lines. She should tell parts of things, and send the pupils to books to satisfy aroused curiosity. She should tell what she is reading, and should leave books around. In all these ways the pupils may be trained toward a right appreciation of a book as a companion and as a tool.

Homemade books. Closely allied to the regular books we find the made book. In looking over magazines for pictures, one often finds whole articles that are within the comprehension of children. These may be taken out by unbinding the magazine, and then they may be fitted with a brown-paper cover. The name should be written upon the cover and the whole bound together by a cheap fastening. Small ones may be held by the little wire fastenings that attach price tags to articles purchased at stores. In time valuable articles for reference may be accumulated. The children should be encouraged to bring clippings, which may be pasted into a scrapbook or kept in envelopes suitably labeled. Scrapbooks are made nowadays of strong manila paper, arranged in pockets on pages, the whole being bound into a book. Such a book may become a most useful tool.

Pictures the next tool. The picture is the next most helpful tool for school use. Reference has been made to it in the chapter on the teacher's equipment. The most fruitful source of supply is the magazine. Magazines are so cheap and plentiful now, that there is rarely a house where they are not going to waste in larger or smaller quantities. Let a teacher once make known her desire for them, and they arrive through various channels. Of course they cannot be kept in bulk, but the pictures may be cut out, and so the value of a year's magazines be preserved in an inch or so of thickness. A novice at the business has difficulty in selection. Often there is a good picture on each side of the sheet, but life is made up of sacrifices, and it is better to make a choice and forget the loss. If the picture is not mounted, one may use both sides. It is wise to mount the more desirable ones, as they get much less wear in this way. The mounts should not be too heavy, causing the picture to take up too much space. Various things may be used for mounts. One teacher, who worked in a large hotel during vacation, begged the discarded menus and had splendid material for mounts for smaller pictures. Some teachers who boarded in the house of a printer found scraps of waste cardboard to be had for the asking. No teacher before had thought of using such things. For mounting, homemade paste may be used; or jellitac, a prepared paste that comes in powder form to be mixed with cold water. For the making of paste, cornstarch is best, the paste being made like any starch, but cooked a long time and strained through cheesecloth when cool.

Many pictures do not need to be mounted. They may be pinned on a curtain as wanted. It is well to adopt

some sort of classification, that one's resources may be easily available. The pictures may be catalogued or those on kindred subjects may be kept in the same large envelope or folder. Care should be taken to select the pictures that are really helpful in general subjects rather than those that are merely beautiful, though the beautiful ones have their place, of course. Many pictures may be picked up that are remarkably good for geography and history and nature work. There are many that contain a story, that are valuable in connection with language work. The advertising pages furnish a large number of these, and some of the illustrations are pretty good as works of art. In these advertisements there are quantities of tiny pictures that may be used for busy-work material, which will be referred to later.

Railway folders give fine pictures for geography. The companies send out these folders and booklets to interest people in the sections shown, and there is no better way to arouse interest than through the schools, so it is perfectly legitimate to secure any such by sending a stamp or the ten cents required. Often they are absolutely free. Many things are advertised by means of small pictures, and a teacher may accumulate them if she keeps the idea in mind. A young teacher once remarked to an older one who had a large number of pictures for use in school, "Those that came my way did n't seem good enough, but I see a lot of them in your collection, doing good work." It is better to start humbly and save everything at first, winnowing when the collection has got large. Post cards, which are justly having such popularity, are excellent and have the advantage of being stiff enough

to stand up, while not occupying much room. A teacher should do her best to get a good post-card collection for herself and the school, but should frown in season and out of season upon the caricatures that are crowding themselves upon the market and, in combination with the colored Sunday supplements, doing their best to eradicate any sense of good art or high ideals of life that schools may be able to inculcate. Good pictures for school use are published by such companies as the Brown and the Perry, at one cent each. They are valuable, but a good collection of pictures may be obtained without directly buying many, if it is gone about with determination.

The school collection. Every school should be encouraged to have a permanent collection that will not have to move with the teacher's box. If the teacher does her best to arouse enthusiasm in the children, they will produce the pictures from somewhere. Frequently they will find suitable material for mounting and will help to mount them, thus getting in addition some manual training. The pictures may be kept in the school library or reference cabinet, and the children may see that they are properly arranged and help to get out such as are needed in connection with the lessons.

Use of pictures. Having secured the pictures, the teacher should use them. She should look over every lesson with the idea of finding those that will help. Often a bunch of pictures may be passed around during the study period as an aid in getting the lesson. Usually it will be enough to put the necessary ones on the curtain or the chalk rail and suggest that the children look at them at recess, after school, or during any spare time in school.

Sometimes the pictures should be shown to the class. If the lesson is on lumbering, for example, as the different steps are referred to, the pictures should be directly shown. It is better for the teacher to pass up the aisle and have the children on each side look, than to pass the picture from hand to hand, which takes too much time and attention. If the look is not sufficient, even when accompanied by involuntary holding, further opportunity may be given as mentioned above. The name should be below the picture, not pasted to the back, so that children may easily know at what they are looking.

If a picture is large enough to be seen from the front of the room, it may be shown to the whole class instead of being taken through the aisles. It should be remembered that it is the children who need to see, not the teacher. A picture should be held so that neither the teacher's body, head, nor arm obstructs the view. Children cannot see through a teacher's finger, even though it be a finger eager to point out the facts of the picture, and a pencil fluttering over the surface not only prevents a clear view but makes children nervously annoyed. Usually a teacher can hold a picture directly in front of her and look over it from above, but she must be careful not to hold it so low that some of the class cannot see.

School cabinet. Mention has been made of the school cabinet and of the little, common things helpful for purposes of illustration. It is to be hoped that the teacher's collection will be large, for this will serve as an incentive to her and to the pupils to secure a permanent collection for the school. The teacher may be able to furnish some things for a starting point. Many manufacturers are glad

to assist in the education of the children, and by judicious appeal to the proper authorities one may often obtain material to illustrate each step in an important manufacture. Often the children will have something to contribute, and valuable material may be acquired. If they are asked to bring samples of anything they have, made of cotton or wool or rubber, and if such contributions are mounted on a chart or put all together into a box, great enthusiasm is easily aroused. The school collection may also include common minerals, articles useful for the science work, and many things good for drawings, such as leaky or cracked cooking utensils of good shape and size, outgrown toys, and other like articles. The contents of the cabinet should be brought out when in any way they illustrate the lesson in hand. It makes no difference if last week they served to illustrate another lesson for the same or a different class.

The collection may become a nuisance if it is not properly guarded against rats, mice, and moths. Tin boxes and small or large bottles solve the problem nicely, though it is well to use moth balls freely when closing up things for a long vacation. Moth balls are cheap when bought by the pound, and the odor soon ceases to be objectionable.

Loans. The children will ably assist in making a permanent collection of interesting things as soon as they realize that it is not rare and valuable objects that are needed, but common, everyday ones. It is possible and desirable, however, to have this greatly supplemented by means of loans. If articles are carefully handled and returned uninjured, many things may be borrowed for a

session or a day from various families in the neighborhood. The teacher should see that things are returned in as good condition as when received, even if it takes time and trouble on her part. Usually people are glad to lend, but unwilling to repeat a bad experiment. Everything worth having is worth making an effort for, and the occasion is often of value as a means of impressing the children with certain responsibilities.

Effect of use in class. Any teacher more than gets her pay for outlay of time, care, and money in connection with the use of outside material, in the progress of her work, and the renewed interest of the children. It is often complained that children, particularly rural children, will not talk in school. Work of this sort will surely produce freedom of expression, unless the child is made of wood and the teacher herself something of a dummy.

The blackboard. The blackboard is a ready tool and should be used in connection with nearly all lessons. Like any other valued tool it should be kept in perfect order, always ready for use. Boards of blackboard cloth are needed often and have the advantage that the teacher may sit to put on such work as is done out of school, and that they may be put up and taken down as need arises. In using the board for drills, the class should be massed in small compass where all can easily see. When explanations are in process a pointer should be employed. It is much better than finger or pencil. Care should be taken that the one using the board should stand on the correct side of the work and not shut off the view of anyone. This direction will serve as well for map use, and it may be well to state that individual work, carried on by teacher

and one child at a map or board when the rest of the class can neither see nor hear, may be supposed to be interesting and profitable to the whole class, but rarely proves to be either. In the same line comes work in which one child works at a table for benefit of the rest. He should stand *behind* the table, *facing* the class, and care should be taken that everyone can see, instead of only the child doing the work.

Maps and charts. Maps and charts are much needed to supplement board work and books. Excellent maps may be made upon blackboard cloth or upon large sheets of brown paper. Such maps may be used for history and geography and may present all necessary features for the work.

Much permanent work, such as drill tables or reading material, may be put upon sheets of brown paper with a rubber pen or with a pointed eraser dipped in ink. The rubber at the end of an ordinary cedar pencil is excellent for this work. These sheets of paper take but little room and save a great deal of labor. Charts may be prepared also by use of the stamping machine, or sign marker, if one can succeed in obtaining the necessary money to purchase it. It consists of a set of small letters, capitals, and figures, each on a little stamp. The printing is done each letter separately, is large enough to be seen across the room, and may be made upon paper or cloth. Large and excellent number and reading charts have been made by its use.

Drill cards. Drill cards of various kinds are necessary. In the reading work one needs them for sight words, phonetic words, and phonograms; that is, single sounds.

For number they are good for multiplication and division drills and for combinations to twenty, as well as for many other drills which will occur to the teacher. They may be made of development paper in varying sizes, but in general they should be large enough so that the fingers will not cover the work. Directions for handling will be given under Reading.

Other apparatus. The teacher will find her work made easier and more effective by the use of some or all of the following material. Most of it may be obtained from the general school-supply houses, like the J. L. Hammett Company, Boston or New York; the Milton Bradley Company, Boston or Springfield, Massachusetts; Edward E. Babb and Company, Boston; A. Flanagan Company, Chicago. Often one can get what material she needs from a printing house. The nearest bookstore may contain it, and sometimes it has to be made by the teacher herself.

Oak tag or manila development paper. May be obtained from any of the above-named school-supply houses, or from any printing house.

Various cheap papers, white or manila, for arithmetic, language, or drawing. Probably furnished, but may be secured from same sources as above.

Colored papers, frequently called studio. Cost about two cents for a sheet 22 by 28 inches. Very attractive colors, and may be made to serve almost any purpose for which colored paper is wanted. Any school-supply house. Its place may be filled by cartridge paper, which comes in rolls for wall covering.

Mounting board. Various weights, a light weight being most useful for general purposes. School-supply houses or printing office.

Bradley's kindergarten crayons (black). School-supply houses. A great help in the writing work with little children. About six inches long and nearly an inch in diameter. A dozen in a box.

Eagle pencils, No. 773. School-supply houses or bookstore. In favor for children's writing. Of large diameter.

Dixon's cartoon pencils, No. 450. For writing on big sheets of brown paper, as for a blackboard. School-supply houses.

Dixon's colored crayons. Beautiful in color and fine for use, particularly with older children. Their place may be filled by crayola or any of the cheaper colors now on the market. School-supply houses.

Dixon's colored crayon pencils. Same colors as the crayons and better for use with little children. School-supply houses.

Water-color paints. School-supply houses. The Milton-Bradley Semi-moist serve well. Their place may be taken by any standard school boxes of color. The pans may be renewed without buying new boxes. The cheap paints found in the market may be used instead.

Weaving mats. School-supply houses. Those mats are best which have wide strips. For learning, one may make mats of table oilcloth.

Colored sticks and pegs. School-supply houses.

Clay. School-supply houses.

Plasticine. School-supply houses. Better than clay for work with little children. Does not harden and may be used many times.

Toy money. School-supply houses. May be made, if preferred, from development paper.

Boston guard penholders. School-supply houses.

Paper rulers. School-supply houses. May be made from development paper. Great saving of noise.

Pitchpipe. School-supply houses.

Seating plan. Edward E. Babb and Company, Boston.

Placards for store or arithmetic classes. Made from development paper. May use ink, paints, or pictures from fruit, vegetable, or furniture catalogues.

Sand tray. Made of zinc. A shallow wooden box will do. It should be quite large.

Globe. School-supply houses. A cheap one serves every purpose. A croquet ball may do considerable service as a small globe.

Solids for drawing or arithmetic work. Made of clay or development paper.

Alcohol lamp. A chafing-dish lamp or any cheap one. May be made from a tooth-powder bottle and a piece of wicking.

Brushes. Cheap ones, bought at the five-and-ten-cent stores, for use in connection with industrial work.

Ticket pins. School-supply houses or Dennison Company, Boston or New York. For putting up commendable drawings or other papers.

Picture wire. Stretched along the top of a blackboard, it serves better than cord for suspending papers.

Gummed cloth patches. Small circles of gummed cloth, having a hole in the center. Excellent stays for the tops of paper charts. The charts may then be hung from two or three nails. Many may be kept in small space in this way, to be used as needed. Dennison's Number 2 are satisfactory.

Mending material. Adhesive transparent tape, gummed cloth tape, loose-leaf binders, T binders. Dennison Company or school-supply houses.

Book covers. Holden Company, Springfield, Mass.

Jellitac. A prepared paste in powder form. Arthur S. Hoyt, 90–92 West Broadway, New York. Probably to be obtained from any dealer in books and school materials.

Day's White Paste. Diamond Paste Company, Albany, N.Y., or Edward E. Babb and Company, Boston.

Raffia. McHutchison & Company, 17 Murray Street, New York. Does not sell in small quantities, but by clubbing or by selling to the children, twenty-five pounds may be easily disposed of.

Reeds. F. B. Alexander, Watertown Street, West Newton, Mass.

Easy Dye. School-supply houses.

Bartlett looms. J. L. Hammett Company, Boston or New York.

A B C Weaving Looms. The A B C Weaving Loom Company, Toledo, Ohio.

Fulton Sign Marker. Any school-supply house or retail dealer in school supplies.

Rubber marking pen. Any dealer in school material. One may use instead a pointed eraser or the eraser in the end of an ordinary cedar pencil. Dip in common ink or in india ink.

Automatic shading pen. Edward E. Babb and Company, Boston. For inking letters or figures.

The "Perfect Scrapbook." Combination Envelope Company, Holyoke, Mass.

Leathers. W. A. Hall, 119 Beach Street, Boston.

Cheap reproductions of good pictures. G. P. Brown & Company, Beverly, Mass., or The Perry Pictures Company, Boston.

Hectograph No. 1. Cooper's gelatin, 3 ounces; glycerin, 18¾ fluid ounces. Soak gelatin in water overnight; in morning pour off excess of water; put gelatin in a double boiler; add glycerin; cook (uncovered) about five hours.

Hectograph No. 2. Glycerin, 20 ounces; white glue, 5 ounces; water, 12 ounces. Soak the glue in the water overnight; bring to a boil; add glycerin; boil six or eight minutes.

Hectograph No. 3. Glycerin, 1 pint; white glue, 4 ounces. Dissolve the glue in hot water, using as small a quantity as possible; heat the glycerin in hot water; stir the glycerin slowly into the glue; do not cook further.

Hectograph No. 4. Glycerin, 18 fluid ounces; gelatin, 2 ounces; glue, ½ ounce. Soak gelatin in water until soft — one half hour, perhaps; drain off all water possible; place in a double boiler until dissolved; meanwhile place glue on back of stove in a small dish in a little water; when glue and gelatin are dissolved, pour glycerin and glue into the dissolved gelatin and leave until thoroughly mixed; let it boil about five minutes.

All these hectographs are known to be good. Several are given to meet varying conditions and tastes. For each is needed a pan, about 11 × 9 × ¾ inches, or 12 × 9 × ½ if that seems more convenient. Such a pan may be obtained at any tinsmith's, and it is better to have a cover for it and to have the edges of both pan and cover hemmed.

When the hectograph is cooked sufficiently it should be poured into the pan slowly to avoid bubbles. When cool it is ready for use.

Hectograph ink may be purchased of any news dealer. It comes in black, green, or violet. This ink is likely to prove more satisfactory, but it is possible to make the ink for one's self, if desired. For it use violet or green aniline (two parts), acetic acid (two parts), water (six parts). Hectograph ink is really dye, so one should be careful in the use of it. Wherever a tiny particle of the dried ink finds lodgment, a spot of color will appear if water comes in contact with it.

A Dixon's Eterno pencil may be used instead of the pen and ink, by wetting it as one writes. The ink is rather better, as it is difficult to keep the pencil evenly moistened.

To hectograph one should write the copy on well-sized paper with a clean steel pen. The hectograph should then be moistened slightly, and the copy placed face downward upon it for perhaps a minute, till a good impression is left. Then the sheets of paper should be applied, rubbed down firmly, and removed as rapidly as possible. When as many as are required have been taken, the hectograph should be washed with a sponge or soft cloth and warm water. The hotter the water the more quickly the cleaning is done, but the more rapidly the hectograph wears away. It should be dried wholly, either by wiping or draining, before putting on the cover, or it will mold.

If in the hectographing the copy blurs, the hectograph was too moist; if the papers stick, the sponge may be used to moisten it more without fear of removing the impression, provided the water be cold; it may be moistened if the papers fur and so cover the copy with a little coating which obscures. If the hectograph seems too soft, it should be boiled some more; if it seems too dry and cracks, it may be heated and a little more water or glycerin added; if it gets worn and ragged in the using, it may be put into the oven for a moment or two, when it will again cool evenly.

A hectograph is one of the teacher's greatest helps. Probably no one device is of so great value. She should never be without one and should use it very frequently.

Books for teachers' use or for children's library. There are many good books to be obtained for the use of the teacher or to stock the children's library. Lists for the former purpose are placed at the end of each chapter. The books included in these lists have been chosen because of their usefulness to teachers rather than because of their fitness to be employed as textbooks in the hands of the children, though many of them would of course serve well in the latter capacity.

The list of books useful for the pupils' library is too long to be included here. A teacher may acquire much information regarding such books by study of publishers' catalogues. The teacher of the smallest school, writing directly to any publishing house for books, catalogues, or any desired information, will receive prompt and courteous response in all cases. There is usually no need to give streets and numbers, since most of the publishing houses are well known. It is possible also for a teacher to make arrangements with the nearest bookseller, by which he will secure all needed books and allow a proper discount, as is done by the publishing firms.

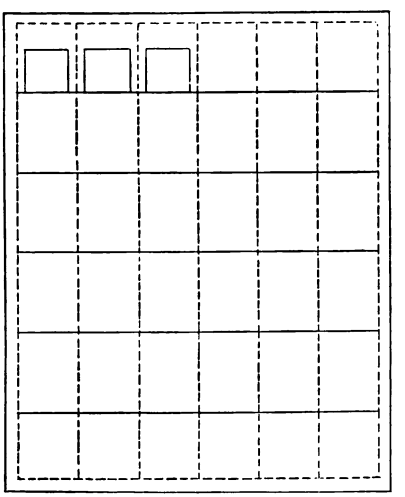
CHAPTER V

STARTING IN

Early arrival desirable. The teacher should go early to her school. She who is landed at her schoolhouse a half hour before time to begin starts at a disadvantage, particularly if she has no idea of the conditions in the locality or of where she is to board. If she is near enough so that she can conveniently do so, it is a good plan to go to the school a few days before and see what things need to be done in preparation for beginning. If this is not possible, she should go at least a day before; that is, she ought to be there by Saturday noon at the latest, if school is to begin Monday. This gives her an opportunity to examine the register if the last teacher has left one, as she ought. She can get some idea of names and classes, find out what books there are, and discover the general resources of the school, besides doing what cleaning may be necessary and making special preparation for the work of the first day.

The first day. When the day comes she should be at the building an hour before the time for the session to open, and lest the heart of the inexperienced teacher should fail her, she should keep busy during that hour. She should continue the practice of being at school early, for many reasons. Being on hand this first day, she can greet each new arrival and get quite a good account of

stock before the actual work begins. Two or three minutes before the regular hour she should ring her bell and assemble her school. It will be an unnecessary formality the first day, but of considerable importance later. The extra minute or two is valuable for getting settled so as to be really ready for work when the hour strikes, though attendance should be reckoned from the regular time. This may be called the warning bell, and prompt response should be expected to its summons. It is the only time in the school day when a bell is really needed, simple signals serving better at other times as being far less disturbing to the school.



Seating and taking names. The children may be allowed to sit where they please at first, but should be made to understand that this is only temporary and that the seating will be attended to later. Then the teacher may arrange it at leisure, with due regard to height of desks and chairs, defective sight or hearing, and disturbing elements of various kinds.

The names and ages of the pupils may be taken immediately. Many teachers use a seating plan like the accompanying illustration. It is made of pasteboard with stiff paper or vellum stitched to form little pockets, as many

as there are desks. Into each is slipped a card with the name of the occupant of the desk. This plan is of value for enabling a strange teacher to locate the name of a particular child at a glance, and the cards are easily changed to accommodate reseating. Many teachers believe that the taking of names should be postponed till later, but it is a great advantage to be able to call a child by name. If slips containing the number of row and desk be ready to be passed, and the older children write their names and that of any small child seated near, the process will take but a short time. The slips may be put immediately into the desk plan, and the teacher is much less hampered.

When all are in readiness on the first day the teacher may ask if there are others to come, express her pleasure that so many are present, and by some quiet little remark insert the opening wedge for good attendance during the term.

Need of watchfulness. During this day the teacher should watch closely and reserve her judgment. She may be able to locate her leaders and to formulate plans for her campaign. Sometimes the children who seem brightest and most attractive do not wear well. The child who appears stupid may be only shy, the slow one may be a pretty persistent worker; so snapshot decisions regarding the school are unwise.

Opening exercises for first day. The program for the day has been planned. Of course the opening exercises come first. These, for this time, should be very simple, consisting perhaps of the reading or repetition of the twenty-third psalm, repetition of the Lord's Prayer, and the singing of some hymn which would be familiar to

all — "America" is usually a safe one. If the teacher is not a singer the hymn may be omitted for a few days, and in places where state laws or school-board action forbid Scripture reading, the teacher will, of course, omit that.

This is all that is really necessary for the exercises of the first day, though if the teacher chooses, she may say a word or two regarding the beauty of the psalm or speak of good schools helping to make a good country, after the singing of "America." She may write some quotation containing a helpful thought on the board and have the children read it in concert, saying she would like to have them learn it during the day. Care should be used in selecting it. It should contain a virile thought that will stimulate boys as well as girls to effort. If the teacher wishes to say a few words to the school as to their common aims regarding the school work, it is all right for her to do so, but such a talk should be very short and may well be omitted.

Program for first day. Following the opening exercises comes the active work of the school. Certain books have to be given out. It will be well to have them all collected at the end of the day, till the teacher can distribute them permanently and make a record. This she may plan at night, after the children are gone.

The work of the first day may include arithmetic, reading, spelling, geography, and perhaps language. The older pupils may perform long examples in the four processes, or they may write the multiplication tables or be given any drill work that can be done without much supervision and that will give the teacher an idea of their powers. They may be cautioned about accuracy and may be furnished with still further work by being required to

prove the examples. In place of this, if wished, a reading lesson may be assigned to be studied or long lists of spelling words may be given. Usually, indefinite work like reading and spelling is much less likely to keep the children occupied than that in which the work is more specific. If spelling is assigned for the first day, it is well to have it studied by having each word that the child does not know he can spell written a certain number of times, though this will not serve for later spelling study; or the older pupils may be given paper and pencils to write an account of their vacation or their ideas upon some other definite subject. Something should be chosen about which the teacher knows that the child has knowledge, that he may not feel unable or unwilling to comply. The object of this first work is to keep the older children doing something till the teacher has a chance to get things going.

Having assigned work to the older ones, the little ones may be called for reading. Into this lesson should go all the variety and life possible. The teacher may impress the older ones by her manner of conducting this first class. After the reading, the little children may be shown how to do some form of busy work. They may work at this till tired, after which they may be turned out of doors for a while, if the weather permits, otherwise they may be given something to play with quietly. After the first class is settled the next smallest or else the most troublesome grade may be called. Care should be taken that plenty of work is given and that the children do not spend too long a time at the same thing. The object, the first day, is to keep them occupied, and it is not specially essential that any particular kind of work be done.

The regular program. Beginning with the second day the regular program should be started upon, though certain less important lessons may be omitted on that day, as details in regard to passing and collecting work and the regular conduct of the classes will take a longer time than the teacher will need for them later. It is not necessary that the time occupied by the classes on the second day should be exactly that of the program.

Place of hard and easy subjects. In making the regular program, the hardest studies should be planned for the freshest periods. Among the hardest studies may be counted arithmetic, technical grammar, and reading up to the point where the children have grasped the mechanical part of it — that is, for at least two grades. The arithmetic work of the first grade, if arithmetic is taken in that year, is not difficult or exhausting. The easy studies should be placed just before recess or closing. In general, the hours from eleven to twelve and from one to two are hardest, though if a longer nooning is taken, the first hour of the afternoon session would be better. With the single hour at noon, the best time is from nine to eleven and from two to three-thirty or four.

It is well to put the arithmetic *early* and the grammar and first-, second-, and third-grade reading in good hours. The order of beginning the day with the highest reading class and working down is bad. The higher reading classes call for interest and attention, but do not furnish work taxing to the brain. History, some of the language work, drawing, nature study, may go into the less favorable hours. Writing should not come when the children have just come in from active play, so it is better not to put it at

the beginning of the sessions, nor immediately after recess. Music may be given at the beginning of a session to calm down with or when specially difficult work is being done, but there should not regularly be a long lesson in music in the early morning, when children are ready for hardest brain work. Music may well be placed between exhausting studies, as it serves as a rest and relaxation if properly managed. Though the formal gymnastic work calls for active attention and is wearying, the physical exercises which are needed in the ordinary school are restful and may be put in between classes as often as possible. Physical exercises should not usually be given just before or after recess, as teachers often unthinkingly arrange for them.

The program should never be planned so that a child will have in succession several exercises calling for written work. In mixed or primary schools space should be allowed on the program for a story. Usually, the last thing before dismissal is a good time for this. With single higher grades the story may be taken with the language. It is advisable to assign a reasonably long period for opening exercises, as into this time may go many of the extras that one wants and yet sees scanty time for. If possible, it is well to have a period in the school program marked "Optional." This should be used habitually for the extra most needed on that particular day. It should not be dribbled away by allowing each lesson to run over a little, nor should it be employed always for the teacher's hobby.

Arrangements for making most of time. Some grading may have to be done by the teacher in a rural school. It should be planned so as to secure to the individual the

best possible results, without injury to the school as a whole. Much time may be saved by judicious combination. After the third year in school any two consecutive grades may read together, alternating the reading material. For example, the fourth and fifth may read the books furnished for fourth-grade reading one year and those for the fifth the next. There is not much difference in the difficulty of the material. Certain drill work in arithmetic may be given to quite a part of the school instead of to classes singly. Some composition work may be handled with more than one class. Classes may be given spelling in combination, or several spelling lessons may go on at one time. Combinations may often be profitably made in a rural school or in one of several grades by including all the children of the school in two divisions — the oldest in one, the youngest in another; or, if the scholars vary much in age, a third division may be made to include the pupils of middle grade. This subdivision is good for music, drawing, nature work, or similar subjects.

Many times alternation may be made useful, history being alternated with geography, drawing with writing, music with nature work; or a regular period may be arranged for writing, drawing, music, and the like, and the *divisions* alternated as above. Certain subjects may take the place of others once a week. It should be remembered that calling two classes together is not a combination unless they do, at least in part, the same work. Such calling is not good planning, as one class sits idle when it might be working.

Recitation periods should be short. The program periods should not be too long. If everything is ready, much can be accomplished in even ten minutes. The teacher should

plan her work as a good housekeeper plans hers — or a dressmaker or a carpenter — and so make every minute count. If preparation has been made beforehand, a short recitation period will cover what is necessary. Children tire easily, and ten or fifteen minutes of vigorous work, with teacher and pupils all alert, will accomplish more than thirty under less favorable conditions.

Written program. It is well to have a *written* program for each day. This program should include study periods for the various classes, as well as recitation periods. The teacher may have this program on a board or chart, or she may have only the recitation program there and tell the children what to study, seeing afterwards that they do as told. They should not be allowed to study as the spirit moves, for they will misproportion their time, losing run of it or studying their favorite subjects. Effort should be made, however, to train children to keep account of their own time and plan their own work.

Changing program. Having a program, it is well to follow it, as a rule. Unforeseen changes confuse the children. Lengthening recitation periods lengthens some study periods and shortens others, and either brings the children unprepared to class or allows a lot of time for waste. Omitting subjects is common and confusing. Gradually a teacher gets in the way of omitting the subjects she cares least for, or of shortening their time and prolonging her hobbies, coming out at night a subject or so short. The teacher needs to be very exacting with herself in observance of her program time, fully as much on her own account as on that of the children, though occasionally a program may be broken. There are times when special

guests have taken great pains to visit a school and are eager to see its workings. It seems a pity for them to be entertained by written lessons or study periods if a different arrangement can be made without too great loss.

Sample programs. As a help in program making, a few are included here. They are not intended to be at all perfect or to present the only proper order of arranging work. They do, however, keep in mind certain well-established principles that govern school work.

PROGRAM FOR A SCHOOL OF TWO GRADES

9.00– 9.15 — Opening Exercises.
9.15– 9.35 — VI Arithmetic.
9.35– 9.55 — VII Arithmetic.
9.55–10.15 — VI Language.
10.15–10.30 — Writing.
10.30–10.45 — Recess.
10.45–10.50 — VI Word Study.
10.50–10.55 — VII Word Study.
10.55–11.15 — VII Geography or History.
11.15–11.20 — Physical Exercises.
11.20–11.35 — Science. Alternating, or a combination.
11.35–11.55 — Drawing. Alternating, or a combination.

1.30– 1.50 — Music.
1.50– 2.00 — Spelling, Phonetics, Voice Drills.
2.00– 2.20 — VII Language.
2.20– 2.40 — VI Geography or History.
2.40– 2.50 — Recess.
2.50– 3.10 — VII Reading.
3.10– 3.30 — VI Reading.
3.30– 3.40 — Optional.

The grades have been termed the sixth and seventh for convenience. Any other numbers would have served as well. If a teacher prefers a longer period for some of the

subjects, it may be taken, and the work in drawing and nature study put into some one or two sessions and made longer. Some teachers prefer shorter recitations each day, while others like better to cut down the number and use a longer time for each. No more than thirty minutes should be allowed for any class, and with grades below the eighth and ninth at any rate, the periods should not usually exceed twenty minutes in duration.

PROGRAM FOR A SCHOOL OF FOUR GRADES

9.00– 9.15 — Opening Exercises.
9.15– 9.30 — I Reading.
9.30– 9.40 — II Word Study and Phonetics.
9.40– 9.55 — III Arithmetic.
9.55–10.00 — Physical Exercises.
10.00–10.15 — IV Arithmetic.
10.15–10.25 — I and II Number. Such regular number work as is suited to first grade may be taken by them in combination with second.
10.25–10.40 — Recess.
10.40–10.50 — III Word Study and Phonetics.
10.50–11.00 — IV Word Study and Phonetics.
11.00–11.10 — III and IV Music.
11.10–11.25 — IV History or Geography.
11.25–11.35 — Writing.
11.35–11.50 — III Reading.
11.50–12.00 — Optional. Nature, industrial work, physiology, or any needed subject.

1.00– 1.10 — Opening Exercises and Nature Work.
1.10– 1.20 — I Reading.
1.20– 1.35 — II Reading.
1.35– 1.50 — III Geography or History.
1.50– 2.05 — IV Language.
2.05– 2.10 — Physical Exercises.
2.10– 2.20 — I and II Drawing or Music.

2.20– 2.35 — III and IV Drawing.
2.35– 2.50 — Recess.
2.50– 3.05 — III Language.
3.05– 3.20 — IV Reading.
3.20– 3.30 — Spelling.
3.30– 3.45 — Optional. Stories, industrial work, or whatever easy work is wished.

PROGRAM FOR A SCHOOL OF FIVE GRADES

9.00– 9.15 — Opening Exercises.
9.15– 9.30 — I Reading.
9.30– 9.40 — II Word Study and Phonetics.
9.40–10.00 — III, IV, and V Arithmetic. Combination for
10.00–10.15 — drills, and then the time divided as seems best; varying each day, probably.
10.15–10.20 — Physical Exercises.
10.20–10.30 — I and II Number.
10.30–10.45 — Recess.
10.45–10.55 — III, IV, and V Phonetics and Word Study. Any
10.55–11.05 — combination that seems best, depending upon reading arrangements.
11.05–11.15 — Music.
11.15–11.30 — V, or IV and V History or Geography.
11.30–11.40 — Writing.
11.40–12.00 — III, or III and IV Reading.
1.00– 1.10 — Opening Exercises and Nature Work.
1.10– 1.20 — I Reading.
1.20– 1.35 — II Reading.
1.35– 1.50 — III, or III and IV Geography or History.
1.50– 2.05 — V, or IV and V Language.
2.05– 2.10 — Physical Exercises.
2.10– 2.20 — I and II Drawing, Music, or Writing.
2.20– 2.35 — Drawing — older pupils.
2.35– 2.50 — Recess.
2.50– 3.05 — III, or III and IV Language.
3.05– 3.20 — V, or IV and V Reading.
3.20– 3.30 — Spelling.
3.30– 3.45 — Optional. Story, industrial or other easy work.

These programs are not arbitrary, but merely suggestive. If the session does not close till four o'clock, a few periods may be lengthened, another optional inserted, or one for help of *special* pupils—not *general* help. If combinations are not possible, the drawing and writing may alternate; or the industrial work and drawing and nature work may go to Friday afternoon, or once a week may take the place of language, arithmetic, or reading; or the drawing and music may be given to all, instead of to two divisions as allowed by the program. If there are more than five classes, the same plans need to be followed.

The points to be observed are that the reading for the little children comes early, also the arithmetic with older pupils; that the hours from eleven to twelve and from one to two, being not very favorable ones, are not given to such difficult work, except for the little children who have had a much longer resting time. They are supposed to go home at recess or else amuse themselves afterwards in the yard or at the play table, the recreation being planned by the teacher. It is to be noticed that classes alternate as far as possible, so that pupils need not go too long at a time without recitation work.

REFERENCE

Seating plan. Edward E. Babb and Company, Boston.

CHAPTER VI

GOING ON

Work should be well planned: use of executive ability. After the work is once started, the teacher should make every effort to keep it going with no friction or loss of time. Everything should be planned to this end. The teacher should go to school early and stay as late at night as is necessary, leaving the room in order when she starts for home. Everything possible should be got ready ahead. The children should be trained to help, to know just what to do, and how to do it in the easiest and quickest way. Awkward arrangement for passing may make a marked difference. Sauntering instead of going briskly eats up a lot of time. Having books arranged in order will save many minutes, and prompt obedience to directions many more. The skilled workman gains as much by making no unnecessary movements as by moving more quickly.

The teacher should always be on the watch for easier and better ways of doing things, for making everything count in a day's work. She should cultivate executive ability. The possession of this quality is about all that distinguishes the master workman from the ordinary day laborer at any trade, and teaching is no exception. A plan book, in which is entered what is proposed to be done during a day, and which is gone over at night to see how far

one has failed to accomplish plans and what have been the reasons, is a great help.

Care to have things right. Care in assigning lessons, so that no time need be spent in disputing, is essential. The importance and character of the assignment of lessons will be discussed further in the chapter on the recitation. Exact directions regarding written papers and the habit of using a set form for names and headings, with other like things, will be of value. Much time will be saved if the teacher habitually does things right at first and trains children to do the same.

Arousing interest. Objective work will brighten impressions and create interest; so will encouragement to the children to talk freely and to question in any subject. There is nothing so effective in teaching as getting free, natural expression of opinions by pupils. They should tell what they think, and ask what they want to know, just as they naturally do out of school hours. Talking not only arouses interest, it shows what the child's difficulties are and makes them easier of correction. Teachers are *afraid* of children's questions, and the lazy teacher regards them as too much work, so we find the pupils continually frowned down, till they become contented with mere rote work — a condition which is utterly foreign to child nature anywhere.

Work important and necessary. School work should be made so pleasant that a child will want to work. He should be made to feel the importance of knowledge in general, so that he will want to learn even at the price of much effort. This is inspirational work. Many teachers act as if the getting of knowledge were not of the slightest importance, and a large number of children have the same attitude,

together with a feeling that it is not their affair. School and home should combine to crush the wrong attitude in this and produce the right. Neither can well do it alone.

Children may be brought to a state where they will look forward eagerly to "knowing a lot" and be willing to make the necessary effort. Usually, however, the impetus must come in connection with particular things. Any child will work uninterruptedly if by that means he sees himself able to attain some greatly desired end. It becomes the teacher's problem to furnish that immediate interest. If all possible means of making school work pleasant are employed, and if the pupil clearly sees an end in view, he will not expect nor desire to escape the hard work that must exist in school just as much as everywhere else in the world.

Things should be ready. Time is not saved either in recitation or study by starting before one is prepared. Between classes the teacher should see that things are ready; that desks are in order, all noisy and unnecessary things put away, material where it can be got at easily, every tool at hand. She should answer the demands of the children as far as is needed. Acquaintance will make it easy for her to judge. When all the studying class are settled to work, then she may give her attention to the division reciting, withdrawing enough of it to keep run of what the rest are doing. She should watch her school just enough to know what is going on. She may, if she chooses, answer a quiet signal, but she should not assist in work or too greatly divide her attention.

Children should be taught responsibility and judgment. The children at the desks should understand that hands are not to be raised except for unusual needs. Much has been

accomplished when it is impressed upon a school that they are to work quietly and *busily* by themselves until the recitation is finished, and that it is usually selfish to interrupt. They should be taught that if a tool gives out or for any reason they are unable to work at the usual thing, they should not sit idle but find some other employment. A newcomer in a grammar school, on being unable to obtain the use of the large school dictionary, sat for twenty minutes and waited for a chance. Any regular pupil of the school, having ascertained by a glance that no opportunity was afforded her, would have turned immediately to something else and worked during the waiting time.

Study work should be independent. Though the teacher should not give much help to the studying child during her recitations, yet she should take some means to ascertain *how* her children study. This may be done sometimes during their recitation periods, or by taking an occasional period to superintend only, or by means of out-of-school helping times, or by casual observation and conversation. She should try to teach right habits of study. As has just been said, pupils need to be busy, and it is usually better for them to work individually. Studying together, helping each other, and the like are all open to objections. Too often the children play instead of working, or if they work, one usually does much more than the other. If older children help younger, the older is often wasting his time. If he can spare it, he might well be advanced a grade instead. The help given by the older child consists too often in doing the work himself. It is, at best, injudicious help, and though it may serve occasionally, it should not be too frequent.

Change of work or leaving places. The smallest children should not be allowed to work in school much more than three hours a day. If they must be in the room throughout the session, as is often the case in a rural school during the winter term, they should be furnished with a large variety of work that is in itself play or even with regular play if quietly carried on. Dolls, building-blocks, softly running toys, and other interesting material that will be mentioned elsewhere are perfectly legitimate. They may be allowed to leave their seats to go to their "library," construction table, or play corner, when their assigned work is finished. Older ones may have permission to consult the dictionary or get reference books, but the teacher should know the reason for any moving about and will frequently have to regulate the conditions, else the study time will be a time of general migration.

Means to be employed to get work done. School exists for training children to good habits, and for the doing of educative work. Many incentives will have to be employed to secure the accomplishment of school work. The chief and best incentive is furnished by arousing in the children a desire to know, both generally and in the particular instance. This is the work of time and inspiration. Too great emphasis cannot be laid upon the value of arousing an immediate interest which is to satisfy an immediate need. As preliminary and supplementary to this, many means will have to be used. The privilege of taking home good work serves well with smaller children, as does the display of it upon the school curtain. One is surprised to find the value attached to this by little children, though we are all pleased by modifications of this form of approval.

Prizes of various kinds may secure good work, but the dangers attending the use are so great as to have thrown them into marked disrepute. They are certainly unsafe in the hands of young teachers.

Keeping in at recess and after school is perhaps one of the most abused means. Recesses should be for play and rest, and the idle or dull child is seldom made less idle or dull by loss of recreation periods. The slow child needs his resting time as much as the quick one. Keeping after school is better and must be done sometimes, but care should be taken lest it be prolonged too far or occur too often. If it is to last many minutes, the child should have a rest before settling down to it. It is often necessary to *help* children after school. If a child is to stay for such help, he should be allowed a recess or relaxing work for a short time preceding the close of school. Doing individual work with a child out of school and detaining him for unfinished tasks are two different things, the child being in a very different attitude.

Home work. Home work is a much-discussed problem. In a rural school where terms are short and home entertainment limited, it is not very objectionable. In other cases it needs to have careful consideration. Unfinished work might often be completed better at home than at school. Work calling for strong thought by the child may better be done at school. Supplementary work like correlated reading is excellent for home employment. Since the child's school day is as long in proportion to his development and strength as his father's working day, the assignment of a considerable amount of work to all pupils, every day, to be done at home is of questionable advantage.

Tests and rank. Tests are used presumably as a means of determining a child's progress, but they serve as a very large incentive to work. Incidentally, in connection with rank, they also serve wonderfully as an incentive to worry and dishonesty. A teacher should use great care in handling both the testing and the ranking. A written test is valuable in helping to get ideas into line, but made a large, or the only, factor in determining promotion, it is wholly unfair and cruel. Tests are frequently merely traps, or, at best, memory tests. School should train more than the memory. *Written lessons*, divested of the large element of worry, are useful and should be employed freely; tests, sparingly and with judgment.

Rank depends largely upon the teacher's mood. It is much better for word estimates to be employed in marking rank, instead of figures. For a teacher to be required to keep marks of any kind for her pupils in *each* recitation is to spoil her direct work in the teaching process in nearly all cases, though it may be well to estimate each child's recitation in an occasional lesson, to serve as a test for the teacher's general estimate of worth. Rank has far too large a place as an incentive to good work. It does not furnish a high motive.

Promotions. Promotion should depend upon general knowledge and general power. A child should be sent to a higher grade when, in the judgment of the teacher, he will gain more from work there than from a repetition of what he has already gone over. Promotion should often be based upon power rather than achievement. A fixed amount of work is needed in some subjects, where ability to go on depends upon actual knowledge, as is the case in

arithmetic and grammar; but a pupil can do good work in geography, history, reading, spelling, drawing, and many other subjects if he has not learned all the geographical or historical facts, done the special reading, or spelled the particular words of the preceding grade. This is doubtless the reason why arithmetic and grammar have been made the basis of promotion in so many schools. Yet even here it is safe to be careful. Reading is surely a better guide with younger children. If a child can read, he can acquire much information in all subjects. Grammar is rapidly passing out of style in elementary schools, and the language work that is taking its place does not have its parts so dependent upon each other. Arithmetic is the most isolated subject. One may be a dunce in it and yet be a useful and cultured citizen. To base promotion upon this subject is manifestly unfair in many instances.

We are too rigorous rather than too easy regarding promotion, and we too often base it upon wrong things. Figures will not always tell the tale. One child may be perfectly able to do the work but fail of particular knowledge; he may well be brought up by extra work. Another fails through general immaturity or lack of power; he should be held, though rarely more than once in the same grade. A teacher should not have a wrong attitude toward the child who does not come quite up to her standard for admission to her grade. Many things have to be taken into consideration in determining a pupil's place in school, and it should be kept in mind that a child has periods of advance and retard mentally, that some children cannot learn some things, and that the school as an institution exists for the education of the child and must

lend itself willingly to whatever best promotes that education. If ever the great strain produced by fear regarding the grade above can be removed, promotions will be better made and a large obstacle to our educational progress done away with. The teacher, relieved of the dread that a particular child may not be pronounced worthy, can teach that child and all her class in better fashion.

Promotions should of course occur more frequently than once a year. It is only a rare case when a child is a whole year behind his class or can be at once thrust a whole year ahead. Semiannual promotions are much better, but even these fail to meet the needs of a large number. The best plan, when it can be arranged, is work on the group idea, a child being pushed from group to group as his progress requires. This is easily brought about in classes of younger children and is practicable in many of the more advanced classes. In the subjects less essential for promotion the classes may work as a whole and be grouped only when it is necessary.

Report cards. The home report card should form a means of communication between teacher and parent. At present it too often seems to speak a foreign tongue to the parents, who see ranks falling below requirement month after month and are yet dazed with surprise at failure of promotion. Report cards might well take the form of monthly notes to parents, stating conditions and needs regarding the child. The regular report card, as now used, should at least be supplemented by a note in cases where home stimulus is necessary or where explanation is needed. If we could succeed in establishing rather different and closer relations between home and school, such

as are aimed at by parent-teacher associations, much might be accomplished. The rural school has advantages over the city or village in many of these particulars.

Attendance. The attendance record should be kept carefully. The card with the child's name upon it may be slipped out, to be returned when he arrives and accounts for his absence, if attendance is kept by means of the seating plan. A book record should be made also. Regularity of attendance should be insisted upon as far as possible. No child who is really ill should come to school, nor should the teacher frown upon absence when the weather is entirely unsuitable, but she should know why the child is absent, and all absence or tardiness for causes that the teacher's judgment pronounces unreasonable should be looked after as far as she is able. Elevating the pupils' ideals, establishing interest in work, creating a general school spirit, appealing to child or parent individually, are means that may be used. Devices such as races, cards with "All present," or flags for different rows may be tried. One teacher sent home for the children and soon had no need to do so.

If a teacher can but establish confidence in herself throughout school and community, making children and parents feel that the school work is such that they cannot afford to miss it and that the teacher has both good judgment and right intentions, many of these troublesome things will adjust themselves. It cannot be done in a day nor a week, but time and effort will accomplish much.

REFERENCE

Teachers' Plan Book and Progress Record. Milton Bradley Company, Boston or Springfield.

CHAPTER VII

THE PHYSICAL COMFORT OF THE CHILD

Teacher responsible for health. One of the things to which it is the duty of the teacher to give much attention is the securing of the physical comfort of the child, both during the time he is in school and for the future. The teacher is in the place of the parent during a large part of the day. In many ways she has a better opportunity to observe the child than has the mother, as during the home hours he is either getting adjusted to the conditions of the day or else is fatigued by his work at school. The teacher is often better informed regarding child hygiene than is the parent, and at any rate should know as much about it. The fact that the children are grouped together in more or less crowded rooms brings a larger responsibility and a greater need for extra care. Every teacher should feel and act as if she combined in herself the offices of both mother and physician.

The room should be comfortable. One of the first essentials is a comfortable room. The temperature should be regulated by a thermometer, the degree at which it should stand depending somewhat upon conditions, since if the floor is cold, one may suffer in a room whose temperature is apparently correct. In general, it may be said that when the thermometer is above seventy degrees the room is too

warm for good work, neither should it fall below sixty-five, and sixty-eight is about normal.

Cold-air schools are all right and very desirable in certain circumstances, but it is to be remembered that children in such schools are dressed for out-of-door living. One should not try to run a cold-air school in a room that pretends to be heated and whose ventilation is not suitably planned. As a usual thing children should not sit in an ordinary schoolroom, wearing the wraps which will constitute their protection when they go out of doors. If a room that is supposed to be heated is cold enough so that children need out-of-door garments to be comfortable, the scheme of work or the arrangements for heating should be changed, yet too hot a room is as bad as too cold a one.

The ventilation should be looked after, windows being opened at proper intervals, but care should be taken to keep the children exercising actively while the windows are wide. I have seen windows opened in the midst of winter, and the air suffered to blow directly on heads, necks, and backs of delicate children who were thinly clad. Some children can stand this heroic treatment, but others cannot. Some wise teacher said, "Better a little slow poison than so much sure death," and his is a good rule to follow. When windows furnish the only ventilation, a screen of cheesecloth in a rough wooden frame fitted into the window will admit the air but prevent the draft. A board may be adjusted to the lower sash and the window raised upon this, so that an opening for air is made between the sashes. In usual weather, if drafts are guarded against, there is no reason why abundant air should not be admitted through open windows all day long, and in any schoolroom

the windows should be opened and the air thoroughly changed during the giving of physical exercises and at other times when the teacher's judgment pronounces it necessary. It is helpful for the teacher to step into the pure air for a moment occasionally, as in this way she is more sure to detect trouble in the air of the room.

Flies. Flies make a room very uncomfortable and are also a well-known source of disease. Things that might tempt them, like apple cores, remnants of luncheons, and dirty faces, should be looked after. Screens may be made by tacking mosquito netting over the whole window frame. A length may even be fastened at the top of the door, but of course flies will creep in, in spite of precautions. Means of disposing of them are suggested in the following extract from an article on the subject, in the *World's Work* of August, 1910. The same article is given in the *National Geographic Magazine* for May, 1910. Some one of these ought to be obtained easily. Sticky fly paper will do the work, but its effect destroys much of the good from our teaching kindness to animals.

To clear rooms of flies, carbolic acid may be used as follows: heat a shovel or any similar article and drop thereon twenty drops of carbolic acid. The vapor kills the flies.

A cheap and perfectly reliable fly-poison, one which is not dangerous to human life, is bichromate of potash in solution. Dissolve one dram, which can be bought at any drug store, in two ounces of water and add a little sugar. Put some of this solution in shallow dishes and distribute them about the house.

A spoonful of formalin (or formaldehyde in water) put into a quarter of a pint of water and exposed in the room will be enough to kill all the flies. To quickly clear the room where there are many flies, burn pyrethrum powder in the room. This stupefies the flies, and they may be swept up and burned.

Desks and chairs. The desks and chairs should be made as nearly comfortable as circumstances will allow. It is probably too much to expect that they be really fitted to the child, though the time for the absolute demand for that is slowly approaching. At any rate, if a child cannot reach to his desk top and cannot touch the floor with his feet, he may be given a board to lift his chair and a box to put his feet upon. Of course it is better that the chair or desk be really raised upon the board, but the board may be merely put upon the chair if the teacher has not the manual skill to do the work properly. These are little things, and they do not make the room more attractive in appearance, but they are aids to the health of the pupils. If a teacher does not know how high desk and chair should be, she may find out by means of two simple measurements. Seat the child well back on a table, with his legs hanging down and his arm bent so the lower arm will be horizontal and the upper arm held close against the side. Place a board beneath the feet, and measure the distance from the board to the top of the table for height of chair, and from the board to the lower side of arm for height of desk top. Call any fraction of an inch a whole inch in the last measurement — that for the desk — and subtract any fraction of an inch in the measurement for height of chair.

Children should be watched for habits like dropping the head too low over the work, sitting on one foot, working with one shoulder higher than the other, laying the head on the desk during work, and many such things, which run as real epidemics through a school. The comfort of a child is sometimes greatly increased by a little care on the part of the teacher as to how the sun shines upon his work.

Nervous children are often very susceptible to things like this, and it is worth while to look out for such children.

Physical defects. The teacher should be constantly on the watch to discover physical defects and should do her best to get them remedied when such remedy is possible. It is a most excellent plan to send to parents regular reports containing statements of the child's health as observed by the teacher and calling attention to any physical troubles, such as rounded or uneven shoulders, depressed head, decaying teeth, adenoids, deafness, or any eye difficulties. Teachers should urge parents to have a careful examination, by the family physician, of children whose work is unsatisfactory or who give evidence of any physical defects.

Compulsory medical inspection, which is making for itself so firm a hold in many places, is of course what is needed, but there still remains much for the teacher to do personally. She will often find her efforts unwelcome and unproductive, but most parents have their children's interests at heart, and though it must be expected that there will be prejudice difficult to break down in many cases, the response is usually promptly and gratefully given. At any rate the effort should be made — not once, but again and again till good results appear. A great deal of the inattention, stubbornness, exasperating behavior, nervousness, and real illness arises from eye strain or inability to hear, and when these physical troubles are corrected the problems disappear.

Tests of eyesight. Tests of sight should be made by every teacher at least once a year, and oftener when there are indications of any trouble. Such tests are frequently

required by law, but the teacher should give them not because she is compelled to do so but because she finds in them a means for increasing her efficiency. These tests are made by means of the Snellen test types, which may be obtained free from the town or county superintendent or from the office of the state superintendent of schools. If one fails to secure them from these sources, they may be had from any optician or dealer in optical supplies, at a very small cost.

These cards contain several rows of letters, each row differing from the rest in size. Above the rows is given the distance at which they should be read — as, ten feet for smallest, twenty for next, and so on, to perhaps fifty feet. The test card should be hung in a good light, at about the level of the child's head. He should take a position directly in front of the card and at the distance from it indicated by the number above the row of smallest letters. He should cover one eye, without closing it, by holding a card in front of it. He should then read by means of the other eye as many of the letters as he can, beginning with the largest ones. If he cannot see the largest letters, he should approach the card till he can. The other eye should be tested in the same way, but the pupil should rest a minute before the trial is made. Children who do not know the letters may be tested by using similar cards, containing, instead of a variety of letters, the letter *E* placed in different positions, they being required to tell in which direction the arms point.

When not in use the card should be most carefully kept from the observation of the pupils, as children very readily memorize the letters, which renders the test absolutely

useless. Even when the card is presented only during the test, it is well to make very sure by using, besides the reading in order, a test in which a piece of cardboard with a small square hole cut in it is placed over the letters in irregular order. Each pupil should be tested without the others being present, so that there may be less danger of memorizing, and this should hold true even of those who have themselves been tested, because the same cards may be used later in making another test.

Not being able to see a whole row of letters usually means nearsightedness, while miscalling certain letters in a line indicates astigmatism. Both troubles need correction by glasses, but while nearsightedness may be helped out by seating in a favorable position, astigmatism must depend upon glasses alone. A single mistake, however, may not indicate a trouble sufficient to need correction, and the teacher has to use her judgment here as elsewhere. Sometimes the child is only careless and can read correctly if he looks more carefully. If there is much difference between the two eyes, special attention should be given to getting the trouble corrected, as a great amount of eye and nerve strain results from effort to accommodate two differing eyes to the same work.

A record should be made of the result of the eye test. This result may be stated in the form of a fraction, whose numerator is the distance at which the child stands from the card, and the denominator the number over the smallest line he can read. If the pupil stands twenty feet from the card and can read no smaller letters than those of the row labeled forty feet, his record should read $\frac{20}{40}$, which represents one half normal vision. The teacher's record should

contain any other points regarding the child's eyes which may help to produce understanding of their condition.

Notices should be sent to parents of all whose tests fall much below normal or whose eyes differ. The teacher should also notify if there is inflammation of eyes or eyelids, if there is complaint of the eyes aching, if the eyes turn in or outward, — indicating a muscular trouble, — if the child holds the book very near his eyes, if he scowls or holds the head habitually on one side, or if he has headaches or is nervous. With such a report should go always a recommendation that a further examination be made and the trouble corrected if possible.

If parents do not wish to have the child wear glasses, the teacher must do her best to favor him in school. Usually the glasses will be forthcoming if the parent is convinced that the child's work and health are suffering from this cause. A potent argument is the very true one that allowing the glasses now may mean that when the child is grown he may in all probability do without them.

Hearing. Hearing tests are very necessary. The testing may be done by means of a watch or a whisper. The watch test would be the more reliable of the two if watches did not vary so much in volume of sound. If the same watch — a loud-ticking one — is used for all the tests, one may ascertain fairly well whether the hearing is normal.

The test should be made in a large room which is as quiet as possible. The two ears should be tested separately. The child should close his eyes, and the ear not being tested should be plugged with cotton. The teacher should find out what is the greatest distance at which the pupil can hear the tick of the watch when held at the level

of the ear and on the prolongation of the line which joins the two ears. Several tests should be made for each ear, the watch being moved back and forth. It should also be covered, or some other means used to find if the pupil really hears, or only imagines he does. A loud-ticking watch should be heard at a distance of at least five or six feet. It is to be remembered that a perfectly quiet room is unusual, and this test is perhaps more useful to discover a great lack of power to hear or differences between the two ears than to determine the exact distance of hearing.

The whisper test is probably the best for general use. It is said that a loud whisper should be heard at sixty feet, a low one at about forty, but the conditions are frequently so poor that it is perhaps better for a teacher to set a standard of about twenty-five or thirty feet and judge by that. The preparation of eyes and ears should be as for the watch test. The child should be expected to repeat things said by the teacher, who will give him short sentences, words, or numbers. Another simple test is to place the pupil with his back toward the teacher, and then let him follow whispered directions for simple movements.

The ordinary tests for hearing are much less reliable than are those for sight, but they will make the teacher aware of any real difficulty, and if such is found, the parent should be urged to have a physician's examination. Notice should be sent if the tests seem unusually short, and particularly if there is a marked difference between the two ears. The parent should be notified also if the child shows other signs of deafness, like inattention, asking for repetition, or dullness in school work. Many times the deafness is due to hardened earwax or catarrh or adenoids, and

proper treatment may correct it. Sometimes the trouble cannot be remedied, in which case the pupil should be seated near the front and encouraged to turn his head in the direction of the sound and to watch the lips of one speaking. Great consideration should be shown him.

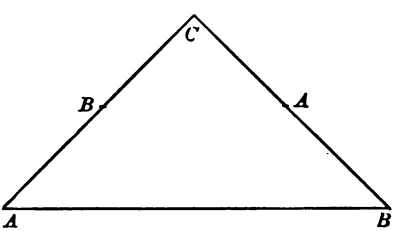
It behooves the teacher to find out and remedy the troubles in hearing for her own sake as well as the child's. If a child cannot hear, he learns with difficulty, is often misunderstood, and seems either careless or stubborn — sometimes really becoming so. If he does not hear what is going on and is not underwitted, he seeks some form of entertainment and so becomes a disturber of the peace, nor can he be rightfully blamed for doing so.

Adenoids. If a teacher finds in her school great, overgrown children, dull, rude, clownish, causing constant trouble, she should be on the lookout for adenoids, for nine out of every ten of such children have these drawbacks to health, good behavior, and progress. If she finds others nervous, anæmic, subject to colds, talking thickly, with narrow jaw and irregular, crowded teeth, and unable to breathe except through the mouth, she may expect to find the same trouble. Much of the deafness, also, comes from this source, although it is difficult to trace the deafness to its cause, since the child who has adenoids is much deafer at some times than at others.

Teachers who find this menace to a child's development and get it remedied will perform a saving service of more value to the pupil than the giving of many lessons. Parents are getting aroused to the importance of looking after adenoids, but there is still much more to be accomplished. Many cases have been known in which the insistence of

the child himself was necessary to spur the parents to action, but such insistence often comes too late, as before the child is old enough to realize his own needs the jaw may be permanently deformed, the health permanently injured, and the mouth-breathing habit so fixed as to be almost impossible of correction.

Decayed teeth. Often parents are entirely unaware that decayed teeth will bring more dangers to their child's health than will most of the greatly dreaded contagious diseases. Insufficiently masticated food brings on digestive disturbances that will in turn cause nervousness, eye troubles, and other bodily disorders. Decaying teeth, with the accompanying bacteria and the fruitful field for a reception of germs from outside sources, are really responsible for many of the contagious diseases. Children with poor teeth and the physical troubles incident to them are often behind in their studies. Teachers should see that parents are informed of all these things.



PLAN FOR DRINKING CUP

Fold a 6- or 8-inch square on the diagonal AB; then fold A to A; fold B to B; fold the corner C toward front, on line BA; fold remaining corner toward back, on same line

Drinking cup. The common drinking cup is a well-known source of disease, but there are schools where the pail and long-handled dipper still prevail. The individual cup is not greatly better, for it is seldom perfectly clean. The best way would be for the children to have light tin cups which could be carried back and forth easily and

which should take frequent journeys home in addition to frequent school baths. Too great drinking at school should be discouraged, till it can be done with perfect safety. The drinking fountain solves the difficulty for schools where there is running water, but the problem of the rural school is yet unsolved. The paper drinking cups are still too expensive to be used generally in such places, though children may be taught to fold cups for themselves. Care should be taken that fingers and papers are clean.

Dry sweeping. Dry sweeping and dusting are to blame for the spread of much disease. Wet paper or sawdust should be used for sweeping the schoolroom when nothing better is to be obtained, and the dusting should be done with a damp cloth.

Individual pencils. Pencils should not be used interchangeably. Each should be marked with the child's name. They may be stuck upright through holes that have been punched in a cardboard box, or they may be thrust through an elastic that has been passed in and out through slits cut in a sheet of pasteboard, each place being marked. They should be arranged in the order in which the children sit, as an aid to distribution.

Lice and itch. Few teachers will be fortunate enough to go through many years without some experience with lice and itch. These are rather delicate matters, but they have to be encountered, and "forewarned is forearmed." The child whose hair is infected should be sent home with a note telling what remedies to try. A hair bath in kerosene is most effective. Alcohol will serve. Quassia, steeped, furnishes a safe and clean remedy. Vaseline, well rubbed in and allowed to stay twenty-four hours, will do

the work. These may not be effective with one application. They sometimes have to be employed two or three times with twenty-four hours between. This is in order to kill the eggs, or nits. The nits themselves may be removed by combing with a fine-toothed comb which has been dipped in vinegar or alcohol. If sending home does not accomplish the purpose, as will be true in some localities, the teacher may roll up her sleeves and, detaining the child after the rest, apply the kerosene, alcohol, or quassia, herself.

Sulphur mixed with lard or vaseline, well rubbed in, for three or four applications, once each day, will probably stop the itch if it is not too advanced. It manifests itself usually in an eruption that looks like water blisters, or in some stages, like chapped hands. It appears between the fingers, in the armpits, at the bend of wrists and elbows, along the spine. It is accompanied by intense itching. A teacher is herself continuously exposed to it, as in many localities it is not infrequent. The public common towel is a most fruitful source of contagion. The paper towels are excellent for schools and cost very little. If the teacher washes her hands habitually, or at the completion of her school duties, with sulphur soap, she is usually safe, personally. All books used by children found with this trouble should be laid aside till they can be fumigated.

Small ailments. Sulpho-napthol, creolin, and peroxide of hydrogen will help in keeping small wounds from being troublesome. Teachers should be like mothers regarding such comfort destroyers as splinters and little wounds. For removal of a splinter a needle should be heated red-hot and then cooled, or at any rate it should be wiped clean

before using. Wiping the needle does not disinfect it, of course, but it may do a little toward reducing the deadly effects that might result, and sometimes neither boiling water nor means for heating the needle may be at hand. The wounds should be washed in one of the antiseptics named, before bandaging. Any slight wound may be washed clean with clear warm water into which has been poured a little creolin or sulpho-napthol, and then wrapped with a clean, soft bandage, after which little trouble need be feared. Sometimes it may be covered with cotton and then a light coating of collodion put over it. It is not well, usually, to apply the collodion directly. Peroxide is good for a scratch or cut in which pus is forming. Peppermint is excellent for toothache or may be administered upon loaf sugar for a pain in the stomach. Camphor may be inhaled when one is faint.

Nosebleed is of frequent occurrence. The circulation should be cooled by applying ice or cold water to the back of the neck and bridge of the nose. Sopping the nostrils washes away the clot as soon as formed, so a dry handkerchief should be held tightly to the nose. A bit of paper put between the upper lip and the gum will often help to stop the flow. If the bleeding is long continued, a plug of cotton should be inserted into the nostril, but a bit of strong thread should be attached, that the plug may be easily removed. The head should not be bent over a basin during the bleeding, nor over a desk directly after the bleeding stops.

It is not usually wise for a teacher to dose a child much internally, for fear of mismanagement and of dissatisfaction at home, but it is well to keep a small bottle of aromatic spirits of ammonia and give a half teaspoonful in a little

water to a fainting child. Once in a while it is necessary to repeat after thirty or forty minutes. In cases where children have a long distance to come to school, something has sometimes to be done immediately by the teacher, and the proposed remedies are perfectly safe.

Contagious diseases. If a child appears to the teacher to have a contagious disease, he should be sent home. A note should go with him, telling what the teacher thinks may be the matter and asking that he be kept at home till it is sure that he is all right. Courteously worded, this ought to produce no trouble. The teacher should not wait till night, or even a few hours, to make sure; she should not let consideration for the parent, or things of that sort, deter her. She is the guardian of the health of all the school, and consideration for *all* must outweigh consideration for one. The law gives her the right to send them home on the merest suspicion and to refuse to receive them back till satisfied of the safety of so doing.

If a contagious disease really breaks out in her school, a teacher should not go into a panic or in any way show fear. She must keep her head, no matter how she feels, and show herself worthy of her office. She must notify her superintendent at once. If she fails to reach him, she should turn to the board of health. She must not only see that those exposed to the disorder remain away from school but she must keep careful watch over the others to detect further trouble. She must reassure parents and children and give no exaggerated accounts. She must see that the books and pencils of the infected child are looked after till they are properly disinfected or destroyed. If a fumigation is decided upon, — and the teacher should urge it rather

than frown upon it, — she should stand books upon end partially opened, open drawers and boxes, and do any other necessary preparation. It is very improbable that she will, herself, take the disease by so doing, and even if she does, it is only one of the risks that she assumes when agreeing to teach.

Instruction in hygiene. Care for the physical comfort of the school may well include direct instruction regarding health. Physiology and hygiene claim their share in the program, but hygiene is what is most needed, physiology enough being given to make one appreciate the hygiene part. Little health talks may be taken in connection with the opening exercises, in the nature-study periods, or wherever they fit in.

The children should be awakened to their need of fresh air and to the habit of obtaining it out of doors, in their sleeping rooms, and throughout the houses. The need of airing clothes should be impressed. They should be taught the value of air in producing health, and that cold air and fresh air are not identical. Many suggestions may be made in a general way as to kind of food, ways of cooking it, and the dangers of too much candy, of breakfasts that are only doughnuts and coffee, of eating at irregular intervals. The need of going to bed early and in the proper place, instead of lying down anywhere and being put to bed later on, should be suggested. The value of exercise, and the fact that both work and play may furnish it and that it should be accompanied by a light heart, should be spoken of. The later textbooks treat nearly all topics in a practical way, with direct application to the needs of the child, and they may serve as a guide to the teacher. It is well to

impress upon the child that all these things, including care of hair, teeth, nails, and all parts of the body, make a great difference in our standing in the world.

Smoking and other bad habits. Temperance, not only with reference to alcohol but to all things, should form a part of the instruction. Smoking should be well expounded. The child should see moral and physical results. He should realize that at the start it produces a feeling of shame, then an attempt to conceal which frequently brings a lie. The effect of the tobacco finally brings about a deterioration, and the child does not become the man he ought. Emphasis should be laid upon its effects on growing boys as wholly bad; this is a matter beyond dispute, even if its effects upon the man be set aside. That is not what immediately concerns the child.

Worse than smoking and use of alcohol, so far as the children are concerned, are certain physical habits of abuse, which the teacher should watch for and fight with all the power and tact that in her lie. Children should be taught generally that their bodies are sacred and that no part should be abused. Little children fall into many bad ways and hand them on to younger children. Before they are old enough to realize, ruinous habits are established. It is a matter for careful approach, but instruction as needed should be given.

Worry and overwork. Children often really worry over school work. They should be kept from this as much as possible. As has been said, too much home study should not be assigned to young children. They will be far better physically, more ready to work in school, if their out-of-school hours are mainly free. If home work is assigned to

the larger children, it should be reading, spelling, nature observation, or something not calling for the application and thought that arithmetic and grammar demand.

Physical exercises. Something may be attained for the present comfort of the child and for his future health, through the physical exercises of the school. These exercises serve the purpose of rest mainly, and they should be taken at any time when the appearance of the children indicates lassitude or nervous strain. They may be very simple, just the exercises that call for the stretching and relaxing of various muscles. For formal work one may make use of such exercises as are suggested in Bancroft's "School Freehand Gymnastics," but the teacher should never attempt such elaborate ones that she feels called upon to read the commands to the school directly from the book. In rural schools and with little children less formal exercises are surely much better. They may sometimes take the form of games. Playing a gymnastic story, like those suggested in "Gymnastic Stories and Plays," always arouses interest. In these, for example, the children play they are trees in a storm and go through all the motions required for the blowing of the wind (breathing), the shaking of leaves (fingers) and limbs (arms), and the bending of the trunk. A teacher who does not have the book can easily imagine other exercises springing out of this idea. Sometimes sufficient exercise for the time may be furnished by playing jack-in-the-box, by playing row or pump, by standing up and stretching and yawning, by running around the room. The exercises should come often to be of value and, coming often, need continue only for a minute. The introduction of the

folk dances in schools where it is practicable is a forward movement, as these furnish exercise for all parts of the body and are productive of grace and freedom from self-consciousness, while they bring keen enjoyment to the children. In nearly all schools adaptations of these dances may be used. Educational papers suggest much helpful work, with the rhythmic idea emphasized. In all schools free calisthenics should be given at regular times, once or twice a day.

Breathing exercises. Accompanying exercises already suggested, must go some that strengthen and train the voice. Breathing exercises and speaking the various vowel and consonant sounds at various pitches and with different force and rate will help in producing flexibility of the vocal organs, in breaking up bad habits of breathing and speaking, and in many such ways. Ives's " Illustrated Phonics " gives many helpful ideas in this connection.

Sense training an indirect aid. One may suffer physical discomfort through defective sense organs, as when one experiences headaches and nervousness because of eye strain. Lack of knowledge and loss of pleasure may come also through lack of training of the senses, so sense training may be touched upon in connection with physical development. Failure to secure proper sense impressions may arise often through the mind's failure to notice and interpret properly what the sense organs report, so drill in sense training should occur frequently in school. Exercises which help in quickening all the senses are easily found. To train the ear, exercises may be given in judging by hearing alone what objects were touched, whether the children walked, ran, hopped, or jumped, who spoke, who sang,

where they were when they sang, what notes were sung. Recognizing objects or people by feeling, finding one's way to the seat by the sense of touch, and other exercises of this kind are good for the touch sense. Telling by smell various flowers, fruits, perfumes, spices; recognizing numerous objects by taste; looking at a collection of objects for an instant and naming as many as possible; telling what colors were changed, what children changed position, and like exercises may be used to the delight and instruction of the school.

The child's physical well-being is certainly of as great importance as his mental development, but it is interesting to observe that usually the two things go hand in hand.

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CHAPTER VIII

MORNING EXERCISES

Many things may be included under the head of Morning Exercises. They furnish a place for a large amount of general work that cannot be put elsewhere. In such schools as give the child long periods of work between his recitations, suggestions may be made during these exercises that may be carried out independently by him. Because of the elasticity regarding the subjects taken, and because here the teacher works with her whole school, it is well to make the opening-exercise period rather longer than is usually allowed. Instead of three or five minutes, fifteen or twenty should be planned; but since this is a good working time, care should be taken that it is not wasted. This time properly used may serve as an impetus and inspiration for the whole day.

Subjects: Scripture. The work should include devotional exercises proper. These have been referred to elsewhere. There should always be included a hymn, a Bible selection, and the Lord's Prayer, unless, as has been previously said, the school use of Scripture is forbidden. The Bible selection should be a psalm or other suitable Scripture which the children have learned and repeat with the teacher. The choice should be made with care, since not all parts of the Bible are well suited to school repetition. As soon as one selection has been learned a new one

should be begun, and all known ones should be repeated in alternation with each other. The teaching of the new may occupy a short part of each opening-exercise period. Unless discussion of the Bible is not allowable or desirable, the selections should be talked over with a view to getting the right understanding and feeling, though nothing denominational should be introduced. If this method of reviewing the old and adding new should be kept up, the children at the end of a common-school course would have quite a fund of most helpful Scripture assimilated and made dear.

Hymns. The hymns should be those suited to children, and may include some of our standard hymns together with certain ones that are particularly fitted to the understanding and needs of young children. The teaching of new hymns may form a part of the morning-exercise work, or it may be done in the music periods.

Devotional poems. It is well to add to the regular devotional exercises what we might call a devotional poem, which may be said over and over again. Two or three of such poems may alternate with each other through a year, or one alone might serve. For this one needs such poems as " Consider," "A Child's Thought of God," " Whichever Way the Wind Doth Blow," or any like selection containing a distinct direction of thought toward the love of God and his care for us or toward our duties.

Other features. The features mentioned may occur morning after morning. In addition there may be given whatever the needs of the day demand. Teaching of new songs, poems, or psalms; singing old songs or saying old poems; talking of the various phases of nature that bring

themselves to the notice of the child; current events; discussion of some particular man or thing that has been assigned to find out about; talks meant for ethical training; salutes to the flag, or other patriotic work—all these form a legitimate part of the morning exercises. The teacher and children get acquainted at this time. Interesting opening exercises decrease tardiness. The keynote for the day may be struck here, and the time is an exceedingly important one.

Current events. Skill is necessary in the discussion of current events. The children need to be trained to real discrimination as to what is worth noticing in the world's happenings. They may be guided from their natural choice of murders and all unholy terrors that appeal to the imagination toward the choice of events which mark the march of the world in art, science, morals — all worth-while topics. It is interesting to watch their growth in these lines. A teacher should hesitate to direct the attention of children to the daily newspapers, which are most pernicious in their influence upon unformed minds. The current events should be gathered from magazines like the *Outlook*, the *World's Work*, or the *Review of Reviews*. A little paper called *Current Events* is in use in many schools and serves admirably.

Ethical Training

Moral training, since it may be reached directly in connection with the morning exercises, is treated in this chapter; but since it is of so great importance and needs large attention at other times, it may well have separate consideration.

Indirect instruction. Ethical instruction is of two kinds, direct and indirect. The indirect instruction must go on all the time. Whenever occasion serves, a blow should be struck for decency and uprightness. Opportunities will come in connection with all subjects, and no single chance to uplift should be neglected. Occasions may be made as if incidentally; a bit of biography or a daily happening may be introduced and so do its service. Effort must be made in connection with all school subjects to develop ideas of accuracy, industry, honesty, and the like, into ideals and to help these ideals to grow into habits.

Careful supervision. Watchfulness on the part of the teacher may prevent undesirable habits. Occasions for dishonesty, untruthfulness, and the like, may be removed. Too great temptations should not be permitted while the character is still unformed. Fear is at the bottom of many lies. Too strong incentives to ambition may produce cheating, and attractive trifles left in a child's way are a direct temptation to theft. Oversight of the wastebasket, suppression of note writing, supervision of children at noon and recess, opening of lines of thought and interest in all sorts of legitimate ways, may save many a child from future sin and the consequences thereof. When to all this is added the good example of the teacher, much more may be accomplished.

Direct instruction. Besides these things, direct instruction is greatly needed. The work should not be left to suggestion or chance. To drill day after day on arithmetic and leave our moral education to a chance hit here and there is poor judgment. Children need direct and forceful teaching regarding politeness, cleanliness, purity in speech

and thought and deed, work, punctuality, kindness, honesty, truthfulness, temperance, and kindred subjects. Such instruction may be given in connection with opening exercises or at some special time set apart for the purpose, but somewhere it certainly should be given.

There has been a prevalent notion that children must never be preached to, and that all that is necessary is a careful watching of habits. Along with this has gone a serene trust that all would be well in the future, which has somehow produced a slipping of responsibility greater than has occurred in any other place in child training. Indeed, the habits themselves have been comparatively little watched. Teachers and mothers have been almost criminally careless in regard to this, too prone to pass in silence conditions they know to be wrong.

Character is dependent upon both habits and ideals, and knowledge should stand as the foundation of both. Before a child's habits are so fixed that they become difficult of change he should have instruction so that he may know what he ought and ought not to do. He should also be given direct teaching, in order that he may have a proper ideal, not that furnished him by some slightly older child.

A third-grade pupil from an excellent family, who stated in an ethical talk that children should not do certain disorderly things while the teacher was out of the room, gave as his only reason that the teacher might come in and catch them. Another, who said it was wrong to copy his neighbor's paper, saw no cause for refraining except the fact that the paper might not be right. These cases show the difficulties under which teachers must work to train children to become citizens having worthy moral standards.

The conditions are not different, nor is the task harder than in other lines of our work, though the accomplishing of our aims is more essential. Why should we expect to have to teach the children reading, language, music, and work in every other line, and expect them to be born with a well-developed moral nature.

There are many ways of conducting the lesson. A good way is to select a topic and work upon it for several days, it being made the theme or guide for conduct. Children will be interested in finding out why the habits are necessary; what, for example, are the advantages of punctuality, of politeness, or of work. They may give their opinions as to how honest or truthful one needs to be. Stories may be told of imaginary happenings and the children be urged to argue on the side they really believe to be right. Behavior on the streets or in public places forms an excellent topic. Children are often little savages because they do not think about it, not because they want to attract attention or be bad.

The topics regarding cleanliness, and purity of speech, thought, and action, need careful handling, but they open a field for work that will yield to none in its need and, if properly approached, in its results. In no line do children need training more. The next decade will witness a marked change and progress toward freedom of discussion and careful teaching in lines now wholly overlooked or touched upon gingerly or with apprehension. With little children the teaching is easy, with older ones it may have to be given as private instruction or to girls and boys in separate classes. There is, of course, great opposition to such teaching in some quarters, but the trend of opinion is very

strongly in favor of such work. To the argument that unskilled teachers cannot handle it, the reply seems to be that that has never been a reason for omitting the teaching of any other needed subject. The teachers should not remain untrained and unfit. They should learn in our normal schools, and in training classes in colleges, and even in high schools, how to teach a subject that is beginning to be so clamorously insisted upon as necessary.

Every school should have its time for giving direct moral lessons. The seed may be sown during this lesson time, and then the teacher should see that proper soil for its growth is furnished throughout the school day. No child should be able to say with truth, as an excuse for any bad habit, that he did not know it was wrong, and no teacher should, through neglect in giving such lessons, put herself in a place where she must feel herself really responsible for the wrongdoing of a child who has been under her charge.

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CHAPTER IX

ARITHMETIC

Importance. This subject has been overemphasized in the schools for many years. It is a valuable subject practically, yet its practical need has been greatly overestimated. For use in life, there is needed a quick and active power to employ the four fundamental processes with whole numbers and with decimal and common fractions including mixed numbers, the simpler work in mensuration and denominate numbers, percentage with its common applications taken in a practical and simple way. Such arithmetical work as is given because of its use in algebra or physics should be saved to be taught in connection with those subjects, and common-school work should be confined wholly to the things directly used in the life of an ordinary person. Arithmetic is of great use as a means of training, but the training can be given in connection with the work that is really needed as well as with the more difficult and unnecessary. Moreover, other subjects which are as interesting and valuable will furnish equally good training. Arithmetic should not receive from the pupils more time daily than that allowed to geography, history, language, or most other subjects.

Much oral and practical work should be taken, with analysis given simply and in the child's own words so long as they express the idea correctly. Modern arithmetics deal

much with mental work, and though the child of to-day is unskilled in arithmetical gymnastics, he can perform many hard problems easily, without the use of pencil and paper. Makers of books are slowly cutting out the absurd and substituting really practical work, yet the teacher has still to winnow considerably from what is left.

Character of first-grade arithmetic. Little, if any, abstract arithmetic should be given in the first year. The children at this age are fond of counting, and a great deal of it may be taken, counting by ones, twos, fives, and tens. The counting should be done with objects, and many games and devices may be employed — such as counting the objects in the room, the desks, chairs, pupils present and absent, blocks, sticks, pegs, or balls. The children may play games that call for counting, like the one named "chickens," in which the teacher scatters corn or small objects on a table and the children get all they can, counting afterwards to see how they stand.

Other first-grade work which leads to a knowledge of number may consist of observation and experiment with measuring things and comparing them — lines, surfaces, solids, pints, quarts, pecks, bushels, ounces, pounds. The children may estimate, then verify, in this way obtaining a concrete knowledge of small numbers. This should never be made abstract in the first year. The play idea may prevail in this work. Guessing the dimensions of objects in the room and then measuring them, drawing pictures of them, finding them by description, naming them through the sense of feeling, building, — as making a seven-inch measure or an eight-inch solid in as many ways as possible, — telling what will be left if one measure

be taken from another, recognizing and comparing dry and liquid measures, with many like exercises, furnish pleasure for the child and leave him at the end of the year with a perceptive knowledge that makes the regular number work of the second year pleasant and easy.

In addition to this he may do considerable work in the way of arranging pegs, or the little kindergarten tablets called lentils, or splints upon his desk in response to written or spoken dictation. The objects representing the answer may be included in the lesson after the arranging becomes easy, the answer being determined by counting, but no attempt should be made to have the work memorized abstractly. The object of first-year work, when any is taken, should always be the acquiring of concrete ideas for later use.

Sometimes present needs may serve to create a number interest and to bring about considerable in the way of a knowledge of numbers. Games, gardening, and construction work of various kinds in which the child is interested, may demand for their accomplishment much arithmetical work. The pupil, eager to obtain certain results, picks up many number facts and finds learning of combinations easy. Often he is unaware of what he is really accomplishing. The teacher should always use means like these to aid in the teaching.

Later number work for primary grades. The regular number work during the rest of the early grades aims particularly to make the child familiar with the common processes with whole numbers. Here he should still feel the play element, and he should be trained to see relations and to use his judgment as much as possible. The first

secret of good work is to have the pupil see the thing concretely till he is sure it is so, then drill on it abstractly till the process becomes mechanical. If either the concrete or the abstract is omitted, the work is faulty. It is often found wise to give the child concrete material — splints, pegs, or other convenient objects — for use at his desk in working out his exercises and then make the greater part of his class work abstract, though this distribution of work is not essential. The main thing is to see that both are given. It is not wise to let the child count his fingers nor make little marks for use in working, as these are so ever-present and easy that the temptation is great not to dispense with them at the proper time. High- and normal-school students are to be found who still do rather simple addition and subtraction by counting, with or without use of the fingers.

All later work must depend upon a knowledge of the number combinations to twenty, so these should be taught with the utmost care. The pupil, after a concrete presentation in class, should do much work by himself, with and without objects, and should also have much class drill. In class he should be required to show the facts with objects, then to pass gradually from the concrete work with objects present to the concrete with objects absent, and from that to the abstract. He *sees* that 8 blocks and 7 blocks make 15 blocks, then he *thinks* 8 blocks and 7 blocks in response to some such question as, "If I give you 8 blocks and you take 7 blocks more, how many will you have?" and finally he is expected to give a quick response to the question "8 and 7 are how many?" When this latter stage is reached he should be required to answer promptly and

without counting. The teacher should not be satisfied till this result is reached; till all addition, subtraction, multiplication, and division are perfectly mechanical.

Multiplication tables need many drills. Modern work makes more of the miscellaneous drill with multiplication combinations and of the relation to counting and adding than of the rote repetition, but there can be no harm in "saying the tables," though, of course, the work should not end here. The tables should be presented through counting — the numeral frame being the best means — and through arrangement of objects. There are many objects easily available for desk work here, such as pegs or sticks. The little wooden tablets called lentils, previously referred to, are very good for the purpose, as they are so small that a little box will contain all a pupil needs. Kernels of corn may serve instead. Many teachers use effectively small pictures showing the required number of objects. If such pictures, exactly alike, be pasted upon a strip of muslin, the pupil may fold over as many as he wishes to deal with and then count for his result; for example, twelve little pictures about an inch square, each containing three apples, to be used in learning the table of threes. For class work one may use a chart containing pictures of objects, or the purpose may be served by using little circles drawn upon the board. These are quickly made, do not tire the eyes as do lines or squares close together, and may be easily erased and drawn again as necessary, or all but the desired number of rows may be covered.

The child should be shown particularly the theory underlying addition and subtraction by endings, as, $7 + 4 = 11$, $17 + 4 = 21$, $37 + 4 = 41$; $13 - 8 = 5$, $23 - 8 = 15$,

$33 - 8 = 25$. Splints — common toothpicks — furnish the best means for objective work here, as they occupy little space and can be easily arranged in bundles of ten. This work, like the multiplication tables, calls for interminable drill, but, like the tables and the combinations to twenty, is of great importance. Children should also be taught many little helps to work, like the fact that to add 9 one may add 10 and subtract 1 or call the tens one greater and the units one less. Children are greatly interested in such relations and can understand them early if their attention is called to them, so this is the time to fix many ways of making things easier.

The processes with whole numbers, once introduced, should be drilled upon without intermission. Such drill occupies but a short time daily and prevents the subject from needing to be taught anew from time to time. Perfection should be aimed at, but not expected too early. Much care is needed to furnish such variety for these ever-present drills that the children find them attractive and give the attention needed to get them well in mind. Games should be played at school and recommended for home. Class time, recess, and noon will furnish an opportunity. Bean-bag games, ringtoss, dominoes, parchesi, flinch, backgammon, are good for improving the number sense. Many class games may be used. The teacher or a pupil may say, "I am thinking of a multiplication whose answer is 72." Another pupil asks, "Is it 9 times 8?" or "Is it 12 times 6?" The teacher says, "I am thinking of something about 11 and 3." The pupil asks, "Is the answer 14, 33, 8?" Hull gull is a good game. In this the child holds a number of small objects concealed in his

hand. His neighbor guesses the number. If right, the guesser gets the objects; if wrong, he gives the other player the difference between his answer and the correct one. For class work many devices should be employed. It makes a decided difference in the interest of most children whether the lesson goes along without diversion or change, or to the accompaniment of a pleasant and harmless fiction, during which he imagines that he is picking grapes, making balloon ascensions, blowing soap bubbles, fishing, or playing tag.

Playing store. Playing store is one of the best of devices. It may be carried to almost any extent. Using liquid, dry, and linear measures, much buying and selling may be done in class. Care should be taken to call for mathematical skill. We may play store without it, but it is to be remembered that our object is to develop it. If we buy four gallons of anything and have it measured in a quart or pint, the child learns the relation between the measures. If toy money is used, the gain from the play is still greater. One may have the real objects or their imitation, pictures on the board, or even cards containing prices, and do a brisk business. The work is capable of great expansion and variety. Children learn to make change rapidly. In some schools a permanent store has been organized by means of a big box and some shelves, and trade has gone on steadily at recesses and between schools, imitation articles accumulating readily.

Work above the fifth year. By the end of the fifth year the children should be letter perfect in all addition, subtraction, multiplication, and division of whole numbers. They should of course know simple work in denominate

numbers and mensuration and have some acquaintance with fractions, but skill in dealing with whole numbers should be the aim in the early grades. In the sixth and seventh grades they should continue drills with whole numbers and become equally proficient with common and decimal fractions, and the work in denominate numbers should be enlarged, leaving the eighth year for percentage with its applications. If there is a ninth grade, it may be used for review. In schools in which many children drop out early, some work in percentage needs to be taken sooner, and in places where only eight grades precede the high school, if the age of entering is greater, the work may be taken more rapidly in the lower classes. No harm and much good results from taking the fundamental processes with whole numbers more slowly than was our former custom, and the pruning of unnecessary work which used to draw greatly upon the time and energy of the pupils has made such a course easily possible.

The child should be the master of his work in fractions, but that given should be confined to small numbers, such as he will usually have to deal with out of school. Many drills should be given, and fundamental ideas well rubbed in. For example, he should be made to understand perfectly multiplication and division by moving of decimal points, and the effect of multiplying or dividing either or both of dividend and divisor, and of numerator and denominator. He should be taught easy ways of doing work with fractions. Many children reduce mixed numbers to improper fractions to add, subtract, or multiply them, using hours of time in this way. The child should be made to see the relations existing between the different divisions

of his work in arithmetic and not allowed to think that every time he takes a new step he is embarking upon an unknown sea, without chart or compass.

Use of class time. Much time is wasted in class by waiting while children work at board. If there is to be board work, the class work should be divided, all of a division being given the same work. After a proper time all should be seated and give attention to explanations. It is a bad outlay of time to keep ten or twelve children waiting while one finishes an example. It is usually better to spend class time in analysis of questions or development of new work, such board work as is done in class being performed by the teacher under the direction of the class. The more difficult work should generally be taken up in advance, but the children should of course have independent practice in doing examples that have not been taken. This class work gives the teacher an opportunity to drill on best ways of going about things, such as finding the cost of *one* thing before that of the given number of things, or noticing just what is given and what required, or getting reasonable answers. All such things children need to have called to their attention repeatedly, for many of them they would never think out for themselves.

Need of independent work. The child needs to be trained to independent thinking, so even in school the teacher should seldom do an example for him, but should help him to see how to do it by questions or through giving him a simpler one to do that involves the same principle. For this same reason arithmetic is better done at school, since it is usually the relatives of a child who are receiving arithmetical training if much work is done at home.

Need of good judgment on the part of the teacher. In no place in connection with her school work does a teacher need to call upon her common sense more than in the arithmetic. The book should be winnowed and such parts as are useless or unreasonable omitted. Puzzles should be passed by, and emphasis put upon such work as the teacher knows to be valuable, leaving out that of doubtful importance. All new processes and principles should be introduced by means of small numbers. All rules should be got at by giving individual concrete illustrations, then letting the child draw the general rule from this, stating it in his own words. This wording being corrected or bettered, he may learn the general truth so that he can state it easily. He should then have abundant practice in its application to particular, reasonable, miscellaneous cases.

A few of many good drills to arouse interest in class. Wheels of various kinds, often made with colored crayons, around which the children may gallop on a pony or race with bicycle, automobile, or airship.

Steps, ladders, targets, railway tracks, balloons, flags, soap bubbles, fish ponds, Christmas trees, and like devices.

Work for speed tests, half the class at board, half working on paper. Scores should be kept.

Modifications of this drill:

$$\begin{array}{cccccccc} & & & & & & & +8 \\ 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \quad 9 \\ & & & & & & & \times 6 \end{array}$$

Columns for quick addition.

Exercises like those given below:

$$9 \times ? = 45$$
$$? \times 6 = 42$$
$$8 \times 7 = ?$$

8
6
4
7 + 5, or − 3, or × 4
9
8
5

9	9	9	9	9	9	9	9	9
1	2	3	4	5	6	7	8	9

8	8	8	8	8	8	8	8
1	2	3	4	5	6	7	8

7	7	7	7	7	7	7
1	2	3	4	5	6	7

6	6	6	6	6	6
1	2	3	4	5	6

5	5	5	5	5
1	2	3	4	5

4	4	4	4
1	2	3	4

3	3	3
1	2	3

2	2
1	2

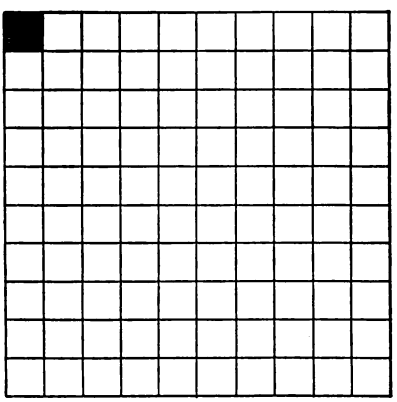
Multiplication table in a square and similar drills, such as the magic squares, in which the sums of the figures in all the rows, added to the right or left, and the sums of

the figures in all the columns, added up or down, will be the same. These are also very good for desk work. Many modifications of these may be thought of.

Rapid, written addition, subtraction, multiplication, or division. Both class and teacher work on paper, the pupil getting answer stands as quickly as possible.

Drills on aliquot parts are excellent.

For common fractions and decimals use the same drills as for whole numbers.



For class drills in fractions it furnishes good work to give quick questions like the following: What is the effect of multiplying both dividend and divisor by the same number? of multiplying both numerator and denominator? of multiplying the numerator? of multiplying the denominator? of dividing the numerator? of dividing the denominator? of dividing both numerator and denominator by the same number? of moving the decimal point to the right? of moving the decimal point to the left? of moving the decimal point one place? of moving the decimal point two places? Tenths of tenths give what? Tenths of hundredths? How shall one decimal place be read? How shall two decimal places be read?

Oral dictation like the following is valuable: 8, cipher, decimal point, cipher cipher, 7. What is the number?

The device on the opposite page is a help in teaching the relation of tenths, hundredths, and thousandths.

A cut-out square which stands for a single thing—a unit.

It is divided into ten "strips." Each is a tenth.

Each "strip," or tenth, is divided into ten "small squares," or hundredths.

Each "small square" is divided into ten "slips," or thousandths.

This may be used to show relations concretely, and for drill in writing decimals it is invaluable.

A few of many ways in which the teacher may help the pupil to easier work. In long-addition work the pupil may be allowed to put the carrying figure over the proper column. He should be encouraged to do this, and no harm is done if he always continues it. It is never a hindrance and is often a help in proof or in finding mistakes.

In subtraction when it is necessary to take *one* from a higher denomination, the figure may be crossed out and the resulting one be written in above, together with the change in the lower denomination resulting from the addition of the new ten. This, however, is only an aid and should be dispensed with as soon as the process is thoroughly understood and has become mechanical.

Children should be encouraged to add up and down a column, and to both left and right when the work is written horizontally. This gets them into the habit of proving their work.

Work like the following furnishes a good exercise for the children. "When I add I get a *sum*." "When I subtract I get a *difference*, or *remainder*." "When I multiply I get a *product*."

In oral work the pupil should exactly reverse his written order and add or subtract the hundreds, then the tens, then the units. For example, if he is to add orally 357 and 246, he says, 557, 597, 603.

Care should be used that both teacher and pupils always write units under units and tens under tens, not only in pure addition but in subtraction, multiplication, division.

The children should be taught to write the quotient over the dividend, that each figure may go in its proper place and the whole example take less room, but they should know that it may be written at the right of the dividend if one chooses. This may save some friction and misunderstanding at home.

Many examples in division should be done in class by both the long and the short method, with careful explanation of the relation between the processes as the work proceeds. The divisor taken should always be small.

Not only in division but elsewhere the numbers used when a new process is being introduced should be so simple that the pupil has no difficulty in handling the numbers. This leaves his mind perfectly free to understand the process.

It is a good plan to teach the little children to place the remainder in an unequal division "on the shelf." For example, $19 \div 9 = 2\frac{1}{9}$. This makes a good preparation for later writing of the remainder fractionally. This fraction, or numerator, should be written in smaller figures, both here and in other places.

It should be thoroughly impressed upon the children that such a remainder is the undivided part and that any fraction is an expression of division.

In multiplying a mixed number by a mixed number many mistakes will be avoided if the child is trained so that he habitually looks for *four multiplications* — the whole number of the multiplicand by the whole number of the multiplier, the fraction of the multiplicand by the whole number of the multiplier, the whole number of the multiplicand by the fraction of the multiplier, and the fraction of the multiplicand by the fraction of the multiplier.

In division of decimals confusion is saved if the divisor is always made a whole number. The pupil should be made sure of his right to do this by frequent drill on the result of moving the decimal point and of multiplying dividend and divisor by the same number.

In finding areas pupils should not say, "Multiply the length by the breadth," leading later to multiplying feet by feet and getting square feet. Of course the idea intended is all right, but it is better to train them to say that they multiply the number of square units in a single row by the number of rows, or some equivalent statement. The same should hold true in dealing with solids.

Analysis is helped if the pupil is trained to notice that his multiplier must be abstract always. This will destroy the tendency to multiply by eggs or dollars. It is also well for him to state just what the problem tells and what it asks.

As many simple ways as possible should be suggested to pupils for simplifying work, such as the thought that lumber will cost as many mills a foot as dollars a thousand, or that coal will be half as many mills a pound as dollars a ton. Business ways of reckoning should be found and given to the pupils. For example, to paper a room first

find the perimeter, or distance around the room; from the perimeter subtract the widths of the doors and windows; reduce this result to half yards; this number of half yards equals the total number of strips required. To find the length of one strip subtract the width of the border from the height of the room. To find the number of strips in one single roll divide the number of feet in one single roll by the number of feet in one strip. Divide the total number of strips required, by the number of strips in one single roll, and the result will be the number of single rolls required. To find the number of strips in one double roll divide the length of one double roll by the length of one strip. To find the number of double rolls required divide the total number of strips by the number of strips in one double roll. To find the number of double rolls of border required divide the perimeter of the room by the length of one double roll.

Percentage examples are usually better done by analysis of the individual examples rather than by rules, though it may be of advantage to know the rules for performing the work under the different cases.

Pupils should be taught most thoroughly that in discharging a note one cannot pay the principal before the interest is completely met.

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CHAPTER X

READING

Purpose of reading. The purpose of reading in our schools should be to make the children readers; to cause them to turn to books, magazines, and all such material, with a real hunger for their contents and with ability to estimate the value of such contents; to produce the reading habit, with the intense enjoyment that is the accompaniment of such a habit. In order, however, to teach a child *to read* he must be taught *how* to read. Care should always be taken that the real object of the work is not swallowed up by the lesser aim.

Primary Reading

The word method. Children may be taught by the word method till they have been given sufficient training in the value of sounds so that they can study out words for themselves. After this power is acquired to a degree, the word method should blend with the sound method, the word work gradually yielding more and more to the phonetic till the children are reading by sound.

Object and action work. Object and action work is helpful in teaching words, and by means of such work great interest may be aroused and speed of learning increased. For this work little toys or any common objects may be used. The children find the object or perform the

act, as the teacher writes the word. "Doll," "baby," "cat," "dog," "rabbit," "ball," "hat," "run," "hop," "jump," "sing," and such words, are good to begin with. Though drill may be given on single words for some time if the teacher chooses, yet it is better to give sentences very early in the work. For this, sentences involving the objects and actions may be used, like "Roll the ball," "Bring the doll," "Make the cat run," "Clap your hands."

Use of rhymes. In some ways type sentences furnish a capital means of work, and rhymes make excellent type sentences because the children easily learn them and are pleased with the rhythm. Some of the frequently used methods of reading are based on the rhyme, and the vocabularies of readers are so similar that any of these methods may be used for starting, even if it is not planned to follow the method entire. If any such method is found in use, the teacher will do well to follow it exactly, till she is sure she knows a better way. If no particular method is in use and the school is furnished with sets of readers, it is easy to look through the vocabulary and make little rhymes or prose sentences which contain the words that it is wished to teach.

The general scheme for teaching reading by rhymes is as follows: Introduce the rhyme by telling a story in which the rhyme is used several times. Teach the rhyme by means of reproduction of the story and by games in which it may be made to occur. Present the rhyme written on board and cardboard. Have it said from the board, each word being pointed to as the rhyme is given. Teach the class to recognize single words in the rhyme, then single words written on the board outside of the rhyme. Soon use the rhyme

words in other sentences. The rhyme serves as a key, and if the child fails to recognize a word, he is referred to the rhyme to find it out. As soon as he is familiar with all the words of a rhyme a new one is presented in the same way, and drill is given upon the old and new words. This line of work is kept up until the child has acquired sufficient power with sounds so the word method may be dispensed with. An advantage of the rhyme method over other forms of word reading lies in the fact that the pupil is at once made self-supporting and is able to find out for himself, by the rhyme, any word of which he is uncertain. Each new rhyme, written or printed on cardboard, is hung up in sight of the class where it may be used for reference. With the rhymes, as with any method, print may be taught together with script or may be used in its stead, or it may be introduced by comparison after a few weeks.

The reading chart. Though the blackboard is the chief factor for presenting the words and sentences during the sight reading, yet a reading chart may do good service in supplementing the board work and saving much time for teacher and class. There are charts for word reading to accompany some of the current methods, but if such cannot be obtained, a teacher may easily make one by aid of the rubber pen or the stamping outfit elsewhere described. The work may be done upon sheets of brown paper or upon cambric. The sheets may be fastened together or handled separately, according to the convenience of the user. A chart of this kind has the advantage of exactly fitting the needs of the teacher who makes it. If illustrations are wished for, they may be done in water color or may be cut from books or magazines and applied.

The chart may present both sentences and lists of words to be used for class drill.

Drill cards. Drill cards furnish an excellent means for giving quick drills. These cards have been described under the head of Apparatus. In using them the teacher should stand in front of the class, in such a place that all the class can see. She should hold the bunch of cards in a *vertical* position and slip the card from *back* to *front*, glancing at the back of each card as she slips it, to see what word is to be presented to the class. She should not walk about so as to stand near the child called upon, nor should she *turn* or *move* the cards in any way. A little observation or thought will show that if all the class are to see all the time, the only way is to hold the cards still.

While variety in drills is an advantage, the card drill is so superior in many ways that it should be employed again and again. Variety may be furnished by such means as giving the child the card or dividing the class into sides and seeing which side will name more words, the card being dropped into one or the other pile as one side or the other answers. The cards may be taken right around the class, or individuals may be called upon, or the class or a division may answer in concert. The word-cards may be used also for other, slower drills. They may be placed upon the chalk rail, and the pupils may choose a card and match it to the object or to a word in a rhyme. Many devices of this kind may be thought of.

Other drills for sight words. The pupil may name words as the teacher writes them and name them again as the boardful is erased, each word being threatened with the eraser to draw the attention of the class, the telling being

done after the word has vanished. As the teacher writes a word the child may name it and find it in a standing list. He may name all the words he knows in a long blackboard list, but the lists should be changed frequently to make this exercise profitable.

Such devices as the game of Cat and Mouse or of Fox and Geese, with the pointer and words, the fish pond, the Christmas tree, the stone wall, the ladder-climbing, the railway train, may be used frequently if the class seems to require stimulating. The words should always be in an upright position and of good size. The guessing game is one of the best of devices. The teacher or pupil chooses a word, and the other pupils guess it by pointing to the words on board or chart and naming them as they point.

The phonic, or phonetic, method. The word method fails to serve by itself in teaching reading, because it gives the pupil no way of finding out *new* words. This is of course a vital defect, and phonic work introduced fairly early in the course is essential if we expect good independent reading. The word method should be supplemented by some method which uses sounds as a basis and so makes the child able to discover new words through a knowledge of phonetic values. Among progressive teachers the fact is well established that careful work in phonics should be undertaken from the start. There are now available excellent systems of phonetic books which require no specially trained teachers and whose subject matter is interesting to children. In such a method the words may be unmarked or the ordinary, dictionary, diacritical marks may be used. Which is done depends upon the teacher's attitude, as equally good arguments, backed by equally good authorities,

may be quoted in support of either practice. There is general agreement, however, as to the need of teaching sounds.

Though reading by the word method may go on for weeks or months, according to the theories of the teacher, yet preparation for reading by sound should be begun soon after the child enters school. He should be taught both the sounds of the letters and the blending of sounds into words, but this work is best carried on in a lesson separate from the reading lesson.

Learning sounds. He may learn the sounds by analyzing words into their elements, beginning usually with initial sounds, as *r*, the first part of "run"; *d*, the first part of "day." Later he may use other parts of words, as *ay*, the last part of "day," "play," "say." By analysis of known words in this way, he may be taught the sounds of single letters and of the more usual combinations of letters.

If preferred, the sounds may be presented outside of words, many teachers choosing not to break up the reading words as early as must be done to get sounds by analysis. In this case it is well to introduce the sounds by connecting them with stories, *r* representing the growl of the cross dog, *f* the sound made by the cross cat, *t* the tick of a watch, *s* the sound of water on hot iron, *d* the sound of the dove. Something may be found to stand for nearly all the common sounds. Cards with pictures of the object and the printed and the script letter may be hung around the room to catch the eyes of the children and strengthen the association. Such cards should not be used for regular drill, but should serve as a key only.

Recognition of word through hearing sounds. Children need drill also, through one or two years, on recognizing

words which they hear the teacher sound, these words not being presented to the eye at all. These should be very easy at first, but later may grow more difficult. Words like "r ight," "s ing," "s ay," and "f ill" are good to begin with.

Sounding words. As soon as the pupil has power enough to recognize the elements, which may be single letters, combinations of letters, or smaller sight words, he should be given drills on sounding words, which may be presented to the eye on board, chart, or card. These words should be very simple at first. Lists of words in a series are best to start with, and this work with a list of words containing a common element should be kept up for a long time, but, after a little, many words arranged miscellaneously should be taken also. The child gives the sounds aloud as the teacher points to them, and then he names the word.

Need of continued drill. Drill in sounding letters, in recognizing words by hearing, and in sounding words should be kept up indefinitely, the last forming the work that, under the head of word study, constitutes the preliminary for all school reading.

Phonetic drills. Phonetic cards, containing a single phonogram either simple or compound, furnish the best means of drill. These cards should be used in the way recommended for the sight-word cards. The drill may also be given from phonetic charts and from board lists. Other interesting drills are the following: Show letters or give sounds and have the pupils tell words or point to objects beginning with that sound. Make sounds or give names of objects and have pupils find the letter that makes the indicated sound. Many variations of these last exercises

may be made. In addition to this work with single sounds *words* may be sounded from cards, board, and chart. This is of great importance and should never be omitted in the daily work. There are several good charts to be obtained, or one may be made by the teacher. This drill work being of so much value, it ought as early as possible to be incorporated into the desk work and made to serve its purpose without ceasing.

Sound should continue to be the basis of getting words in reading. Remembering that this sound work is given as a means of reading, the teacher should never fail to use it to that end. Some teachers keep their phonics always apart from reading, while others use the work for a little while and later discard it. As early as possible it should be made a direct means for reading and should so serve continuously.

If no method is in use. If the teacher finds a particular method being employed in her school, she should use it; but if no method is given her, and she has only the usual school readers, she should adapt her method to the circumstances. She should teach the most common sounds first. She should do much *general* phonetic work, because every common word sounded by a child tends to suggest to him that the proper way of getting at words is through sound. The teacher should also, as soon as the child advances a little, — say with the beginning of the First Reader, — watch in his book for every word of which he has had the elements, include it in the board lists, and also have the child get it by sounding from his book if he falters over it in his reading. If this plan is kept up carefully, very soon the pupil will be able to get most new words phonetically.

Any teacher may obtain much help by study of the manuals issued in connection with the various reading methods. This is true whether she is following a particular method or working along by herself in an attempt to formulate one.

Supplementary reading. It is not usually necessary for little children to study their reading lessons in advance, but it is very desirable that they read silently and by themselves from books of about the same grade as the class readers or a little easier. If a supplementary set of different kinds has been secured, as suggested earlier, each child will have access to as many books as he can read in the time available. These books, arranged on a desk or low shelf, may be called the First- and Second-Grade Library, and the children will doubly enjoy the idea of going to the library or of borrowing books from it. In addition to this, the children should be encouraged to read at home, both silently and aloud. There should also be much class reading, from books easier than the regular readers. The teacher should read to the class frequently. Dramatizing, and anything that will give life and interest to the work, should abound. Every effort should be made to create an interest in reading, a desire to read much and well.

Reading with good expression has its effect in producing a desire to read. In the work with higher grades, suggestions are made which should help to better expression. Here it may be said that a child reads well that which he thoroughly understands and enjoys. Getting the story ready, talking about the conditions, playing one is the person speaking, imitation, many such devices, serve as a help, and always the child should be impressed with the fact that in oral reading he must give an idea to others in

such a way that they may understand and enjoy it with him. One of the best means in such work is the having frequent exercises in which one pupil reads and the others are without books or else close their books and listen. This work is of advantage through all the grades.

Advanced Reading

Difficulties and general method of treating. With the children who have advanced somewhat in the art of reading, the work often presents greater difficulties than does that with a class of beginners, since these children frequently have not acquired the power of reading thoughtfully and expressively and of making their reading a large means of acquiring information. It is to accomplish these things and to arouse in the children a fondness for the right kind of reading, that the teacher must work long and faithfully. Often the more advanced classes have been taught to read by the word method only and are without a means for getting new words. So the first thing the teacher should do is to ascertain how much the child is able to sound words, and if he is found lacking, to teach him to know the sounds of all the letters and common combinations and the way of sounding words. This may be done much more quickly than with the younger children, but in about the same way. The work may be given in the word-study time, which should form a period by itself, but it may also be taken as a part of each reading period if that seems better. If the children are reading matter too difficult for them, they may be put back, or the reading lesson may be made very short and a large part of the time, at first, be occupied by the phonetic-drill work. Such classes should

also have many exercises in giving the sounds called for, as, "What is the sound of short *e*, which is marked with the curve, or breve?" "What is the sound of long *a*, which is marked with the straight line, or macron?" Till the child gains some power the teacher will have to help him to get words by telling him the syllables or by spelling, but she should aid him by sounds as rapidly as possible.

Work for pronunciation. In order for a child to read well in class, he should know how to pronounce the words. This, as stated, should be accomplished by the word study. Such words as seem troublesome should be put upon the board and taken up with the children before the study of the lesson is taken. They may be marked diacritically if it seems best. They should be carefully and correctly pronounced by the children. A word not known should be sounded, the child being helped in the sounding by telling the accent mark, the syllables, or the sounds of the letters. The pronunciation of the list may be repeated at the beginning of the recitation if the teacher thinks it necessary.

Work for understanding. To read intelligently, a child needs to know the meaning of the words and of the selection as a whole. For this he may be trained generally to look up in the dictionary such words as he does not know the meaning of, and specific words may be assigned to look up. He should also be trained to the habit of judging what a word may mean by its use in the sentence.

Understanding the whole idea of the lesson is best gained by thought, and much free discussion is a great aid to thought. Talking about the lesson before, after, and during the reading not only greatly enlarges a child's understanding of the subject matter but puts him in a

sympathetic attitude which greatly helps his reading. There should be little limit to permission given the children to ask questions freely and to volunteer opinions, and such free questioning is sometimes stimulated by requiring the children to prepare several questions to be asked of each other. Free discussion, in which the child is moved by interest and tells his opinions and asks those of others, maintaining his ground by argument, is better than telling the story of the lesson, though that has its place. Too close discussion of every paragraph as it is read, the meaning of every word and idea being dragged out from the one who has done the reading, is likely to defeat the purpose for which it was intended. It is better to have a collection of paragraphs read and have a general class discussion at intervals. The one who has done the reading should usually correct his own mistakes of pronunciation or meaning, but if he also tells all about the section, he gets too much time, and the rest of the class lose their interest.

Other aids. Punctuation furnishes an aid to correct reading, but it is not well to have the children read by following punctuation rules. They should be taught that every punctuation mark means something, and therefore one should seldom be read over. A period, for example, shows the end of a thought, and the reading should recognize this; a comma indicates a slight division and so should not be overlooked. The child should be trained to make his reading say something as he thinks the author meant it to be said. He should read so that he may entertain and please his classmates, who form his audience. Many general directions of this sort will help children to a power to read well.

Position and voice. When the time comes for an individual child to read he should pass to the front of the room, with book held at his side or in some other easy position. He should not study the page on his way. He should stand facing the class, erect, on both feet, with head up. The book should be held so he can see easily and so the mouth shall not be covered. No exact direction can be given, as eyes differ, but usually the book is held too near the body, and the head is dropped so that clear utterance is impossible. To get the head fixed and then adjust the book is a good order. The high, harsh, schoolroom shout or scream should be avoided, as should the schoolroom mumble. Distinct, rather than loud, reading is what is needed, but it should be remembered that there are partially deaf children in nearly every company.

Interruptions and corrections. The child should read *uninterruptedly*. There should have been abundant word study, and that is supposed to have included the hard words. Now the pupil should show what he can do. Interruptions break the thought, disturb the reader and the listeners, and are altogether undesirable. They easily turn the reading time into another word-study period. After the reader finishes his paragraph the teacher should help him to correct his mistakes. She should not stand near him, since all the class will be benefited by the work and all should hear. She should indicate the mispronounced words by line and number, help him to see the exact mistake and correct it, bring out any wrong impression by questions, and then, if *necessary*, have him read it again. If the teacher looks after the corrections instead of having the children correct each other, their attention is saved

for the really important things of reading instead of being centered on the finding of petty flaws.

It is very essential that corrections be made in a way to increase a child's power to read. Telling him how to pronounce is of very little value. He may be told a dozen times the way to pronounce a word and be little better off. Often he gives it correctly except for the sound of a single letter, or the accent. Much time may be saved if the teacher learns to recognize the exact difficulty instead of working haphazard for a long time over a word. In general, the things that matter are the ones to be corrected, and certain unimportant things may be passed by. It is not wise to take half the recitation period to correct the blunders of one child. Some of his mistakes may be passed, or he may read a shorter section. True it is that he needs the reading and the correction, but the attention of a whole class should not be lost except for very large reasons.

Re-reading. Certain children need extra reading after school with the teacher. It is better to take it then than to waste the time of the class and hurt the self-respect of the child by frequent re-reading or by taking too much time. It is not kind to have the work of some children always marked as unsatisfactory by having the paragraph read immediately by some child who can do it better, nor is this specially good for the one who reads it better. This reading over may be done in a few instances when several have a try at it, but ordinarily it is better to have the reading progress without much repetition. Much of the repeating is unnecessary. One need not read a whole paragraph for one or two mispronounced words. No reading over

should be done till the mistakes are corrected, and a second reading, when one is given, should always show a marked improvement over the first. It is to be remembered, however, that poetry differs from prose, and the stanzas may well be read more than once in many cases, suggestions and corrections following each reading.

There has been not only too much reading over of paragraphs but too much reassignment of lessons. This has been due in part to lack of books, but a teacher may better worry her superintendent greatly in her demand for new material than waste the time and courage of the class by droning over books they already know by heart, while the world is full of good literature going to waste.

Best reading material. Readers of the kind called supplementary are very much better than the ordinary reading books. Methods of getting such reading have already been suggested. If books are obtainable only with difficulty, one may get on fairly well if only the teacher and the pupil reading have a book, the others listening in turn. The books read in class should be really worth while, and those not too long should be chosen; "Little Nell," for example, being better in this respect than "Little Women." It should be kept in mind that much reading of good literature is the very best means of training children to love that kind. The teacher may also do much in the way of increasing love of good literature by judicious recommendation and suggestions on those lines. It were better that a child were given a fondness for good books than that he learn by heart the pages of many textbooks. The silent reading in the schools should be much increased, reading being done in connection with geography, history,

language, and science. There should be much of this sort of reading, with short reports in class. In this way the research habit is formed and the expression habit aided. It is worth much to get a child to the place where he turns to books for information. Every means should be employed to create and maintain a taste for right reading, yet far too often a teacher, by her attitude if not by her words, discourages a child's interest in books.

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CHAPTER XI

DICTIONARY STUDY

Power to use the dictionary is necessary for much of the regular school work, and children should be trained early not only to the power but to the habit of consulting it. Many teachers begin earlier, but if the dictionary has become a ready tool during the fourth and fifth school years, that will answer all practical purposes.

Preparation for formal dictionary study. As a preparation for the work, a review should be given in arranging lists of words alphabetically: first, according to the first letters; later, according to all the letters. For this last it is a good plan to give lists, all words of which begin with the same letter. The teacher will have to make sure that the children know the letters in their order. When they can arrange such lists readily they may do some diacritical marking of words. Teachers will do well to see if they themselves can do this correctly. A good way to find out is to mark some words and then sound according to the markings, and note results. If children have been given marked words in connection with their reading, no trouble need arise here. If not, they will have to be taught most carefully the dictionary markings for all vowels and consonants.

Class practice in looking up words. When the pupils can arrange a list easily and interpret markings with a fair

degree of skill, they are ready to look up some sample words. The first work should be done in class under the superintendence of the teacher. A small dictionary should be used, as the larger ones are confusing. It works well to begin the exercise by asking the general place in the alphabet of a number of letters; for example, *c* near the beginning, *m* and *n* near the middle, *s* toward the close, *r* just before *s*, *w* quite a distance beyond *s*. In this way the pupil gets a notion of where to open the book in looking up a word and of which way to turn when it is opened. Finding the proper letter, he looks for the word near the beginning, the middle, or end of that section, as the case may be. He is trained to know whether he is almost there or whether he has gone too far, by his observation of the successive letters; *abr*, for instance, coming before *abs*. The words at the heads of the columns will help also.

Determining pronunciation. Having found the word, he learns to get its pronunciation by the markings and accent, or in some cases by finding it spelled out. Sometimes he has to turn to the key at the bottom of the page, but it is better that his key should be located in his brain, though he ought to know that different dictionaries sometimes differ in their markings. Webster markings, however, are nearly identical with those in use in most of the modern reading series.

Knowledge of parts of speech. It is further necessary, in part for the pronunciation, sometimes for the meaning, that the child learn the markings for the different parts of speech: *a.* for adjective, *v.* for verb, *adv.* for adverb. He needs also an ever-increasing ability to recognize the parts of speech as he meets them anywhere. Their value in

dictionary study furnishes a strong argument for giving much simple practice in such recognition through the fourth grade and upwards, yet the recognition of parts of speech is a difficult thing, and perfection should be only aimed at and not expected for a long time.

Testing knowledge of meaning. The test of a child's knowledge of the meaning of words is found in his power to use them intelligently. Little children, in connection with their word study, may be asked the meaning of many words, no exact definition being expected, only something that shows the child's understanding. The teacher may also give simple definitions in place of asking the pupil or may illustrate the use of the word. The pupil should frequently give words in sentences. It is a pleasing exercise as well as a profitable one. From the time when the dictionary comes into use, the teacher should repeatedly test the child's definition by the sentence. Excellent practice is furnished by selecting words from the reading lesson for looking up. The pupil should find the word in the reader and the definition in the dictionary. He should read the sentence aloud from the book or from his copy of it. Then he may substitute his definition for the word in the book. He may also give an original sentence containing the word and an original sentence with the definition substituted. Care should be used that the sentence really shows if the child understands the meaning. It is not wise to try to teach all the meanings the word may have, just its meaning in the particular place being better. Many teachers, by assigning a few words daily to be looked up, in time enlarge greatly the children's vocabularies and increase interest in the study of words.

DICTIONARY STUDY

Need of individual dictionaries. Each child should have a small dictionary to keep in his desk. There should also be a larger one for general use. Webster's Collegiate Dictionary serves very well for all the more usual needs of a school.

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CHAPTER XII

SPELLING

Time of beginning. Opinions vary as to the best time for beginning spelling. Many do much work with it during the first year, while others do not begin it till the middle of the second. Third-grade children should undoubtedly have made quite a deal of progress in the spelling of simple words, but it should be remembered that much may be done towards making spelling easy before set spelling lessons are begun.

Manner of beginning. Before children are able to do much in the writing line they may be given spelling practice by means of the word-building letter cards. Work of this sort may be done at their desks to any extent desired by the teacher. As soon as pupils begin to write at all freely they may copy from board or paper very short sentences containing the words used in their reading. A sentence made by the pupil and written on the board by the teacher should be copied over and over, till at last the teacher, thinking the child must have a mental picture of the words, erases them and tells him to write the sentence many times on his paper without seeing it. If he can write it without looking at it, he knows how to spell the words in a way sufficient for his needs. Getting so one knows how a word looks is an important step in the process of spelling. This plan of writing sentences from copy and

finally from dictation, when once begun, should be kept up during all the first years. After a while the sentences may grow longer, but they should not increase in length too rapidly, short sentences being best for some time.

Series spelling. As early, also, as the time when the child has mastered in his reading work the sounds of the more common single letters and the combinations earliest met, he may begin to make progress in building words from common elements — work which is generally called series spelling. To neglect this drill is to make the child work for a long time in conquering individually words which he might just as well overcome in squads of varying size. Knowing that *a-i-l* spells "ail," he can with ease and interest make a large number of *ail* words and thereafter have them at his command. This work, begun reasonably early, may be prolonged — in connection with other spelling — through the third year, and it forms an excellent medium for establishing a pronounced spelling interest, the interest increasing with the age of the children. The child learns to spell and gets a broad view of the demands of spelling, as much through the words he suggests for his series only to have them discarded as through those that are accepted. If, for example, he is using the *oat* series:

"What word can you think of?" says the teacher.

"I should use *b* with *oat*."

"What will the word be?"

"'Boat.'"

"Spell 'boat.'"

"*B-o-a-t*, 'boat.'"

"Who has another word?"

"'Coat,'" says the next.

"How shall we spell it?"

"*K-o-a-t.*"

"*K* does make that sound, but we use another letter here. What other letter makes that sound?"

"*C.*"

"That is the one. Now spell 'coat.'"

"*C-o-a-t.*"

"Who has another word?"

"'Noat.'"

"No, we spell 'note' *n-o-t-e.* That gives you a new way of saying *ote.* We will try those words a little later. Can you think of another?"

"'Moat.'"

"Yes. What does that mean? We may also use *m* with *o-t-e.* What does *m-o-t-e* mean?"

The words of the intended series and of the new suggested series being put on the board in columns, and the incorrect spelling, like *k-o-a-t*, not being written, the child has profited by his mistakes.

The work of the lesson may be continued on paper, the pupil writing all the words he can think of. The teacher, looking over the papers afterwards, finds certain errors that may be taken up before the class in general, a few to be spoken of individually. It is often well to make a revised list from the papers of the children and put it upon the board, to be surely learned by all the class. Usually the children will suggest words of one syllable, but frequently much longer ones will be thought of. Bouton's "Spelling and Word Building" and the "See and Say Series," Books II, III, and IV, furnish good material for this work. In connection with the series spelling, the pupil may be

taught much in the way of putting his spelling on a logical basis, for though spelling is greatly a matter of the eye, yet certain sounds are habitually made by certain letters and certain letters make certain sounds, and the child should be made to recognize this. That is what was meant by saying that a foundation may be laid for spelling before a great deal of actual spelling is done.

Learning value of letters. Learning the value of letters for spelling may be begun along with learning the sounds. The teacher should ask repeatedly what letter or letters may make a certain sound which she gives orally, and she should drill on what sounds certain given letters may make. A common mistake in spelling is illustrated by these words: *mad,* intended for "made"; *multitud,* for "multitude." The child should be taught to know that *m-a-d* spells "mad"; that the very thing that makes us pronounce *m-a-d-e* "made" is the silent *e* at the end, which always changes short *a, e, i, o, u,* into long *a, e, i, o, u.* If he is taught the effect of *i* upon *a* in such words as "plain," "gain," "rain," then he will remember to put it in. It is better to teach the relation between letters and sounds and show the pupil how to think out a corresponding letter for a given sound in a few words than to spell mechanically a large number. True, his reasoning will often fail, but his spelling will often come right in this way, and at any rate it will usually approximate the real sound of the word.

Spelling of miscellaneous words. Early in school work the pupil may be given miscellaneous words for spelling lessons. These words may be selected from his reading or other lessons or from a spelling book. Where reading is taught by phonic methods spelling books are needed less

than where the word method only is followed. Still, spelling books have much to commend them. If too hard or too rare words are encountered, the teacher should use judgment in making omissions. Children have a reading vocabulary in excess of their writing vocabulary; that is, they understand many words that they meet in reading, which they would never employ in their writing — just as a little child for a long time understands what is said to him though unable to express himself freely. A child's spelling vocabulary needs to keep up with his writing vocabulary, but not necessarily to equal that of his reading. Most spellers are at least a year too advanced, so that it would be well to have each grade spelling the words intended by the author for the year before. Not only that, but the teacher, knowing the power of her class, should select such words as fit their needs and calmly pass by the rest. Always it should be kept in mind that the common words, like "till," "until," "which," "where," "there," "their," and "gone," are the words that the children will most surely need and which they will be less likely to look up in the dictionary than the harder ones. The pupils may be relied upon to learn the spelling of some words through finding them in their reading, and that method of learning should be trusted to in the case of unusual words or those needed for school work only.

Oral and written spelling necessary. The child uses his spelling in his writing almost exclusively, but oral spelling is quicker and more interesting, and many children find the act of writing so difficult that they have no thought power left with which to spell. Such children need to amass and store many words through oral spelling. It

seems evident that both oral and written spelling should be used. In lower grades the oral should be greatly in excess of written; in middle, they should be about equal; in the highest, the written somewhat in excess. Definitions very simply expressed and sentences employing the word should be a frequent accompaniment of the lesson.

Oral spelling. In neither oral nor written spelling should the words be given out in the order in which they are presented for study. For oral work it is well to have the word pronounced before and after spelling, and many good results come if the spelling is done by syllables, each syllable being pronounced after it is spelled. Many devices may be adopted for improving oral spelling. The children may stand by rows, each child sitting as he spells correctly. If desired, the teacher may quickly write each misspelled word correctly on the board for the child to spell right before he sits. Account may be kept of the number of words missed by each row. The words may usually be given out with better effect miscellaneously, as each child listens rather more closely.

Written spelling. In written spelling, neat papers should be exacted, the children being trained to spell the word correctly the first time. Syllable separation should be avoided here, as such a separation keeps the word from giving to the eye the right effect so valuable in helping to correct spelling with some people. The words should be begun with small letters unless the capital is an essential part of the word. The pupils may correct each other's papers occasionally, but too much observation of incorrect spelling is not without its effect in blurring the mental image just referred to as being so helpful in producing correct spelling.

Study of spelling. It is essential to produce as earnest study as possible, but what children need more are proper ways of study. The teacher is a very necessary factor in spelling study, and she should study the lesson with the children as often as may be — at any rate till she has established the right habits. It is well to pronounce all the words first, distinctly and emphatically, otherwise the child may fix a bad pronunciation by his very eagerness to learn. The pupil should be trained to select the hardest words and study those, not waste himself on what he already knows. Spelling is so largely a matter of the eye as well as ear that the flash method of study is good — having the class look at a word for an instant then close their books and think how it looks, after which some child should spell it aloud. The pupils may also spell the words from the book in concert, closing the book after each word and spelling as many times as the teacher thinks best, or they may spell by rows or singly. Through all this work the teacher should keep them watching; thinking; using judgment as to amount of study needed, as to relations of sounds; noticing little tricks for help, like finding "a rat" in "separate" or "lie" in "believe." Certain rules for spelling may well be taught; as, *i* before *e* except after *c*, or when sounded like *a* as in "neighbor" or "weigh." Some of the others are the rules for changing *y* to *i* before an added syllable; for dropping silent *e* at the end of a word, before the addition of a syllable; for doubling consonants before additions, if the consonant is preceded by a single vowel in words of one syllable. Only the simplest rules should be taken. They are easily learned at this stage, long remembered, and occasionally used. Sometimes the

children may be given slips of paper and complete their study by writing the words as many times as seem necessary to fix them in mind, not the same number of times for each word.

Spelling in connection with other lessons. Spelling as an isolated subject is being given less time in schools, though much may be said in favor of straight spelling lessons. It is receiving greater attention as a handmaid in other subjects. This emphasis is a very good thing. Learning to spell words because they are needed in writing, studying them for this purpose before the writing, and after the writing because of misspelling, will produce great improvement. An excellent plan, which takes very little time, is to select the most important words which have been generally misspelled in a set of papers and have them spelled at the beginning of the next lesson in the subject. They should be only five or six in number, and the plan is not to drill upon them, absorbing much time, but to have the class hear them spelled correctly once, with attention. Such work has been known to produce a marked gain in general spelling power. It will be found that nearly all will have misspelled the same words.

Encouraging spelling interest. Spelling sometimes becomes so attractive to children as to be almost a mania. They wish to spell everything, and enjoy it above other subjects. This time is quite apt to lie somewhere between the third and sixth grades. While this fancy is on, it should be emphasized by taking even more than usual time for it. It should also receive the approval and encouragement of the teacher and may be fostered in many ways — by matches, by starting ideas like spelling all the

names of kitchen utensils or names of animals, flowers, or foods. Anything suggesting a game or contest will arouse interest.

The spelling match is a device well calculated to produce enthusiasm. It may be used in connection with both oral and written work. Keeping account of perfect spelling lessons, choosing sides, spelling down, any like idea, will stimulate to great effort. If the words to be used in a particular spelling match be given out for study a week or so ahead, the match will not only serve to create interest in spelling generally but will make the child learn to spell these special words. If spelling proceeds with no attempt to arouse enthusiasm, a whole class will often miss more than half the words day after day with little disturbance on their part, so the teacher has to lend herself as an incentive in the matter. Too great stimulus, however, either of rank or contests, leads easily to cheating. If a teacher can produce correct spelling through a sense of its importance and a desire to be a good speller, it is probably better so; yet many devices, rightly handled, will help in this way.

Combination of classes. Combinations of classes for spelling may be made easily. Two classes may study the same words, but this is not at all necessary. In either oral or written spelling recitation two or three or more classes may work at the same time, the words being given to each alternately in written work, or, in oral, the child to whose class it was assigned for study being called upon to spell a word. The teacher may turn from one part of the speller to the other or she may copy the words of the separate lists so as to handle the work more easily.

The poor speller. The teacher should remember that, while spelling is of great importance, some children are born almost wholly lacking in the power to learn it. Such children should be helped by every spelling scheme known. They should put a reasonable time on it, but stress should be laid on simple words. They should be taught to look carefully at everything they copy, to know that they are weak in spelling and so use observation and the dictionary freely. Spelling, though essential, is not really vital. The man who cannot spell may be strong enough in other ways to employ a typewriter, so no child should put all his time upon it or be too greatly condemned for inability. Spelling may be "an accomplishment he cannot afford the time to acquire."

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CHAPTER XIII

LANGUAGE

Early language work, oral and incidental. In the first few years of school life there is little time or need for regular language lessons, yet this time furnishes an excellent opportunity to get the child well started toward a mastery of correct oral English. This is always of greater importance than written language, since all the world talks, while the greater part of it writes only occasionally. The purpose of training in English is much better served by means of uninterrupted attention to the language met incidentally than by any set language lessons.

Ways of improving English. There are at least five excellent ways of improving a child's spoken English, outside of the regular lessons: (1) the teacher should use correct English herself; (2) she should present as many good models as possible in the shape of literature — that is, through the poem and story; (3) she should make the child talk as much as possible; (4) she should habitually correct the English he employs; (5) she should get him into the habit of watching his own language and that of other people to see what forms are used and what are the best ones.

The teacher's English. Few teachers give the attention they ought to their own forms of expression. Early associations, too much hearing of poor or incorrect forms,

carelessness, laziness, and a lack of appreciation of its importance cause the teacher to present day by day to the children models that should be shunned rather than copied. Incorrect English seems to be contagious, and the teacher should fight it as she would any contagious disease. She should watch for its symptoms in herself and destroy them as rapidly as possible. When she makes a mistake she should go back and correct it. Observation of the work of many teachers reveals a surprisingly small percentage who speak correctly or notice the mistakes of others. We shall never greatly improve the language of our people till the teachers furnish better models.

Presentation of good models. Children who read at home a great deal, and who are in the habit of hearing good literature, early acquire book language in their speech. This may be amusing sometimes, but it is the foundation for a grasp of good English. It is perfectly possible to pick out from a school, children who live in cultured, reading homes, just from their vocabularies and their ease and fluency of expression. Too much cannot be said in favor of an abundance of good literature in school — for training in English expression, if no other good came from it. More will be said of this in connection with the poem and story.

Free expression by pupils. Children do not talk enough in school. They pass through the day, week, and month, in many schools, and hardly give free expression to a single idea couched in their own language. They answer Yes or No or a book sentence to the questions. The teacher talks much, the children but little. This is altogether wrong. The purpose of much of the talking of

the teacher should be to produce free talking by the child. With little children the answers should usually be given in sentences. This will be somewhat formal work at first but will soon grow into a habit. Even this is not enough. What is wanted is free, spontaneous talking by the child, just as he talks out of school. Much rambling will be present, but after free expression has been obtained, then we may train the child to talk to the point. At first it is not very necessary that he stick directly to the point at issue. He should be allowed to tell his long and round-about tales; this may be looked out for later. Freedom of speech cannot be obtained by set language lessons, it must come in every lesson. The morning exercises, the reading class, the geography, particularly the nature lessons, every place in the day in which the child forgets himself, will furnish a good opportunity. He should be given things to talk about. They should be made so interesting that he longs to tell and to ask. This is the secret of free speech. In a certain school in which free talking has always been encouraged, new children find themselves first in the nature lessons, next in the geography and history, then in the reading. These subjects, in the order mentioned, seem to arouse the child's interest and bring him out of himself. Little children are usually ready enough, but often a year or two in school seems to kill the power which it is so desirable to develop. If this plan of free talking is consistently followed, the children not only learn English but they are using the proper method of learning anything.

Correction of pupils' English. The child's English should be corrected, but not in such a way as to dampen his ardor. If correction is begun early and kept up as

carefully as in arithmetic or grammar, the pupil learns to take it as a matter of course. He should not be stopped in the middle of a sentence to correct him, and the correction should seem incidental, but it should be made unless for some strong reason to prevent it. It takes time, and in case of foreign children seems to get more than belongs to it, but the foreign children need English as much as anything and might as well be taught right. If a teacher corrects every mistake she sees, she may be sure that many have escaped her and need not worry for fear of overthoroughness. We need to know how to talk. We are judged by our control of the English language more than by any other single accomplishment.

Arousing interest and watchfulness. Quite early in their school life children may be trained to watch their own speech and that of their companions and to note the occurrence of the poorer forms with intent to root them out. I have known children in third and fourth grades to grow eager to substitute "very" for "awful," to use "may" and "can" correctly, and to weed out expressions like "we was," "have got," and the like. It seems to them a sort of game, and this is the time to establish the right form as a habit.

Exercises to secure correctness. If one watches children's mistakes, one sees that they group themselves under comparatively few heads, like double negatives, incorrect tense forms, incorrect use of the cases of pronouns, adjectives for adverbs, regular plurals of irregular nouns, regular past forms of irregular verbs. The teacher, having observed carefully and marked the lines of greatest need, should plan as many exercises as possible to furnish drill in use

of correct forms, since the only way to accomplish much is to have the right expression repeated times enough to make it at least as familiar as the incorrect.

A regular lesson may be given for this drill. In this the teacher might distribute small articles to the children and ask of each, "What have you?" The answers "I have a book," "I have a pencil," "I have nothing," oft repeated, finally will produce an impression, and this may be strengthened by effort on the teacher's part to make the pupil wish to speak correctly.

There are many stories, liked by children, whose reproduction will furnish drill on needed forms. "The Three Bears" may serve to fix "been," "eaten," "broken," and words ending in *ing*; and many stories give a chance for repeated use of the past tense of verbs like "see," "say," "do," "go," and others that are frequently incorrectly used.

Language games give an excellent opportunity for this work. A little ingenuity will produce many of these, which may be used over and over. A child may describe another and the rest may guess who it is, the leader answering, "No, it is not he" or "Yes, it is she." Drill on "saw" and "have seen" may be given by showing several objects and asking of each child, "What did you see?" or "What have you seen?" In another good game the teacher or a pupil gives the present tense of a verb and the one called upon gives the past. This may be varied by having a sentence given instead of the verb alone. An attractive drill for past forms may be found in the "What did you do?" game. The pupils, asked the question one after another, must answer quickly, "I brought some wood," "I caught some fish," "I blew a horn," "I threw a ball," or

any similar sentence. Language games may be multiplied indefinitely and never cease to give pleasure, as well as drill in use of correct forms.

Various forms of expression. Any form of expression increases the power for general expression. Drawing, cutting, paper folding, modeling, making, acting, have an important part and should be employed in turn. Every lesson should have language for its secondary aim, and if this idea were well carried out there might be less need of lessons called language lessons only.

Written language work with lower grades. Written language work is impossible to any degree in the first grade, unnecessary and not practical in the second. The children have not grasped the vehicle of expression sufficiently so that they have any thought for what they are saying. A little copying or dictation or work such as may be taken in connection with the writing or spelling is, at most, all that should be allowed. Even in the third grade, writing as a means of expression is not easy, but certain exercises may be taken. Writing over and over some of the expressions habitually incorrect, — such as have been mentioned above, — very simple descriptions in response to questions or to use certain words in connection with a picture, a brief reproduction of a very simple story, putting together nouns, adjectives, and verbs to form correct groupings, many exercises like these, may be employed with profit.

Work with older children. Even with older classes the oral work should be in excess of the written, though more and more writing may be called for. The order should be free writing first, correct writing later, as for the oral work.

A child should never be called upon to write until he has some ideas. Objects of nature, the history or geography or reading lesson, may furnish the starting point. Many language books suggest subjects for study taken from nature, art, literature, and the teacher should cull freely from these and find others in the lessons that come up day by day.

Much of the written work may take the form of letters, and the teacher should try to develop the power to write a neat letter in which the pupil says what he wants to say, connectedly and simply. The children may also write original stories or imaginary descriptions, but work for which material is provided is by far the best.

Pupils may be helped in their writing by questions or outlines, though what is called free writing should never be omitted. Much oral work, helpful for writing, may be done in preparation of outlines, study of paragraphs, making of topics, and discussion of typical papers. Corrected papers may be copied, but too much copying is harmful, and when she employs it, the teacher should satisfy herself that it is accomplishing the improvement sought. In after life not much time is given to copying written material, and the point to be aimed at is the making a fairly presentable paper at the first draft. Training a child to go over his paper by himself with a definite aim for improvement is better than too great dependence upon the copying idea.

Work leading to technical grammar. Technical grammar should be saved for higher grades, yet certain things that a child needs for daily use must be classed under the head of grammar, so we must have some work with the

side of language that leads to grammar as well as with the side that leads to composition. Drill should be given on the parts of a sentence, on parts of speech, comparison of adjectives, parts of verbs. Much of this can be taught incidentally, and much of it should be taken in the form of games, contests, and the like.

Technical grammar. In the higher elementary grades some work has still to be done in grammar, though we are outgrowing the notion that a child must have mastered all its intricacies before the high school. Technical grammar is, in fact, ceasing to be an elementary school study. The children are not at the age when the interest and ability for mastering the difficulties of grammar are as prominent as they will be later, and most of what is needed may be acquired through the language work. If it is retained in a grammar-school course, the work should be confined to recognition of parts of speech with their *simpler* properties, classifications, and relations; a speaking acquaintance with phrases and clauses and their work; and the analysis of easy sentences. Having an idea of the value of language — with the habit of looking and thinking carefully before stating language facts — should count as a fair degree of merit in estimating a student's ability in English grammar, at high-school entrance.

In teaching the various steps in such work in grammar as is retained, all new things should be approached, as in arithmetic, concretely by illustration; then should come the general idea, then the application. These steps should be followed not only in taking the subjects for the first time but on later approach, when the children are more mature and better able to discriminate and generalize. The application

should be frequent and strongly made and should not be confined to work presented in class. Class work should in some way accomplish the end of making the pupil feel that the rules and principles taken in class do not cease to exist when that class is excused, yet a teacher should not be too exacting regarding knowledge of grammar, nor too discouraged or impatient if the child seems dull. Power for abstract logical reasoning comes late. A child is so occupied physically that he lacks force for decisive work at the age of the eighth or ninth grade, and his answers are more often careless than ignorant. A noun is so unlike a verb that when a pupil thinks "noun" and says "verb" he seems uncommonly stupid. If grammar must be had while children are immature, the pupil should at least be judged by what he is on his best day rather than by what he is on his worst.

It remains to treat of three subjects for formal language lessons, to be used with all grades, — the picture, the poem, and the story.

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CHAPTER XIV

THE PICTURE

Introduction. The picture deserves treatment under three heads — Drawing, where it appears as a work of art; Apparatus, in which it figures in a most important rôle, since it furnishes such an easy and valuable means for illustration and explanation; and Language, since it presents such good material to serve as subjects for lessons. It is in its relation to language chiefly that it is considered in this chapter, though reference may be made to its place in other lines.

Treatment. Many language lessons may center about a picture. The lesson may include the study of the picture as a work of art or may deal more particularly with the story it has to tell. In such study the children should be made to talk freely, and their English should be carefully corrected. Direct attempts at composition may be made in connection with this work. A picture may be merely described and talked about, or it may be made the basis of an imaginary story. With little children, the first is the more customary treatment. The teacher should try to lead them from a mere enumeration of the things they see in the picture to a connected statement of the relation of the things to each other. "I see a man," "I see a horse," should be changed to, "In the picture is a man who is putting a shoe on a horse. He holds one of the horse's

feet up to put on the shoe." Gradually the child will become able to give a connected and vivid description of anything seen either in a picture or elsewhere.

It becomes plain that the best picture for language purposes is one that contains a story. This is true, no matter how it is to be treated. Many pictures do not contain stories, but many of the best run over with suggestion. As the child gets older he may be trained to make up rather pretty or virile stories about the pictures presented. He may name the people, imagine adventures, and add the help of his creative imagination to the development of his observation and expression. Much may be done to train a child's ethical sense and feeling for the beautiful as a sort of by-product of the English lesson — though the English should be made the by-product.

Sources. Though care is needed in the selection of pictures, they are not difficult to obtain. Those hung on the walls for decoration should form the subjects of lessons, since the pupil gazes at them day after day, and his appreciation of them may be hastened by a study of them under the guidance of the teacher. For class work many small ones are obtainable. The Brown and Perry companies have done real service in presenting cheap copies of good pictures. Illustrations from magazines are often exactly what is needed, and some of the advertising pictures, particularly those of the soaps and cereals, are attractive and made by good illustrators. Calendars that furnish good pictures are often to be found. If a teacher keeps always on the watch and has high ideals which she turns upon low places, she may get material enough. The children's joy will be abundant pay for the exertion. In one school, where

frequent lessons are given upon bunches of pictures, which the children look at and express opinions about in free English which the teacher aims to make correct, the little hands grasp the passing picture and hold it for a last, fond look. Funny things bring smiles of appreciation. Condemnation as well as praise is freely bestowed, and the children are growing into a knowledge and taste that scorn the Sunday comic supplement, and, in gradually improving English, they express love for the good.

Use in connection with written work. In addition to oral work in class, pictures may help greatly in connection with the written work of the pupils. The making of booklets has grown into much prominence in many schools. These booklets may contain a single poem or reproduced story, or specimens of the work of an entire term or year may be included. Good pictures in black and white or in color may be cut from various sources and mounted to illustrate the work or decorate the covers. In the same way any written paper of a pupil may be illustrated or adorned by use of larger or smaller pictures. The thoughtful teacher will think of many ways in which the picture may contribute to the language development.

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CHAPTER XV

THE POEM

Value of poem study. All literature consists mainly of poems and stories. She who teaches familiarity with good poems and appreciation of them has done much to widen the child's horizon, furnish pleasure for dull moments, create an appreciation of the beauties of nature, develop the ethical sense, and supply a means of comfort in hours of trouble. No child, taken young enough, can fail to be trained to a fondness for poetry. Poems should not be regarded as frills. They are not. They directly teach many things; they occupy the time and thought of many of our greatest scholars; they are of more importance than a large number of our so-called practical subjects. From the standpoint of English study they do a great deal to broaden a child's vocabulary, to increase his knowledge of arrangement of words, his pleasure in their harmony, and his understanding of grammatical constructions. The poem may be taken in many places in the school program, but there is no logical reason why one may not let it occupy certain of the periods directly assigned to language lessons.

Selection and sources. The teacher should be guided in her selection by the needs and tastes of her class. She who tries to arouse a class of hardy, lusty boys to an interest in poetry through one of Alice Cary's poems is making a mistake and will defeat her own ends. They

should be given "The Cloud," "Sheridan's Ride," "Song of Marion's Men," "A Song of the Sea," "A Christmas Carmen," "One Hoss Shay," something with rhythm, swing, and dash that will take the boys off their feet, or something to touch their sense of humor. Often the roughest boys, after they are trained a little, will have the keenest appreciation of the simple, gentle, and beautiful. Usually the teacher does best work with that which she herself likes, but she may grow to like something that did not at first appeal to her.

The subjects being studied, the time of year, and many such things should be taken into consideration, since increased interest is often aroused in this way, but a poem should never be taught for the single reason that it correlates with the work. No rule can be given for suitability to age. Some poems are good for little children, others for larger ones, many seem suited to all ages. No harm is done if pupils sometimes learn a poem a little beyond them. They will grow to greater appreciation instead of tiring of it. Several short poems will accomplish more than one very long one. Children like variety, and weary of a really beautiful thing if it is too long continued. Many of the longer poems should be read to the children, however, and many more suggested for out-of-school reading or learning.

Usually the standard poets will contribute all that are necessary. Selection may be made from Longfellow, Tennyson, Whittier, Bryant, Wordsworth, Field, Stevenson, Jackson, and Larcom and countless others. There are many excellent collections, like "Open Sesame," "Nature in Verse," "Poetry of the Seasons," "Land of Song,"

"Poems Every Child Should Know," and the teacher would do well to get access to as many of these as possible. School readers and language books present some excellent material. Many things may be culled from papers and magazines, but these sources present some less valuable poems and so should be scanned with care.

The best book for the teacher is her own poetry book — a blank book of considerable breadth, to accommodate the lines, but not too large to handle easily. In this may be copied the poems that please her. Such a book soon grows to be dearer to a teacher than the best volume ever published. It takes little room, may be always at hand, and may be filled in odd moments.

Preparation for teaching. The poem once selected, the next thing is to prepare one's self to teach it. The first step is to learn the poem. This gives the teacher greater appreciation of its merits, makes her feel it more. It leaves her free to watch the class during the teaching, and so brings her into better harmony with them. It adds to her dignity and power, makes her seem superior to the learners. It also acquaints her beforehand with the difficulties, so that she may the better meet them. The rest of her work of preparation is to think out ways of explanation of words and phrases and to get her preparatory discussion in order. The purpose of such discussion is to get her class into the mood for learning and produce a sympathetic state of mind, and it may be done in as many different ways as there are poems.

The teaching. When the teaching time comes, the work should be introduced by this discussion to secure sympathy. Then the poem should be repeated by the teacher,

usually the whole of it, though if it is exciting and has a story in it, giving it stanza by stanza may be the best way. This repetition being over, and any resulting discussion, the teacher may say the first stanza again, then discuss it for meanings — the purpose being not to pick it to pieces unduly but to surely comprehend it. Then it may be said again by teacher, then by teacher and class as many times as is necessary for learning. As the children's voices grow more assured the teacher's should grow less and less prominent, until they are saying it by themselves. This stanza should be repeated until surely known, then the second should be taught independently. At its close the two may be said together. With the youngest children, the poem may have to be taught a line or two at a time instead of by stanzas. It is to be remembered that the first object in all poem study is to train the child to feel and love the beautiful in literature, so a poem should never be so over-analyzed as to lose sight of this aim. Many poems should be presented to the pupils with no analytical study whatever, but those selected for this use should be simple enough for the children to understand as a whole.

Recently, interesting results have been obtained by teaching poems as wholes, the entire poem being repeated over and over, and the pupils, as rapidly as they are able, joining with the teacher in the repetition.

Often it is well to let the children learn poems by presenting them to the eye as well as the ear. The results are quicker, and longer poems may be handled in this way. They may be presented on the blackboard, or use may be made of the brown-paper chart and rubber pen or of the stamping outfit for printing.

Reproduction. It is a good idea to have the class reproduce the poem in writing if the children are old enough. This helps to fix the words, furnishes drill in writing poetry correctly, and often uncovers wrong interpretation to the teacher's eyes. With younger classes, if the teaching has been through the ear alone, the last word of each line may be put upon the board as a guide in writing. All words which might prove troublesome should be placed upon the board in class, though they may be erased before the writing by the children if it seems best.

Manner of reciting. The voice of the class should not be too loud. Poetry often needs strength, but more frequently it is feeling that is lacking. A loud voice disturbs the other pupils, and sweeter tones are usually what is needed. Much attention should be given to expression. The old-time concert reading in schools may be replaced by concert repetition of poems and all the good resulting from such reading be obtained in this way. Concert recitation is usually better for poem work than individual repetition. Even if all children do not get the poem learned equally well, the feeling is there, which is the main thing.

The teacher's chief aim in poetry study should be to make the children love poetry, but there should be secondary aims, looking toward growth in general knowledge and the development of good English. The following poem has been selected for illustration. It is used by permission of the author, Mrs. Mary Austin, and of the Century Company, publishers of *St. Nicholas*, in which the poem appeared. Thanks are here extended for the privilege.

THE ROCKY MOUNTAIN SHEEP

The red deer loves the chaparral,
The hawk the wind-rocked pine,
The ouzel haunts the rills that race
The cañon's steep incline;
But the wild sheep from the battered rocks,
Sure foot and fleet of limb,
Gets up to see the stars go by
Along the mountain rim.

For him the sky-built battlements,
For him the cliff and scar,
For him the deep-walled chasms
Where the roaring rivers are;
The gentian-flowered meadowlands,
The tamarack slope and crest,
Above the eagle's screaming brood,
Above the wild wolf's quest.

When in the riot of the storms
The snow-flowers blossom fair,
The cattle get them to the plain,
The howlers to the lair,
The shepherd tends his foolish flocks
Along the mountain's hem;
But free and far the wild sheep are,
And God doth shepherd them.

MARY AUSTIN, *St. Nicholas*, September, 1900

This might be introduced in several ways — by talk of the different haunts of animals and why they like to live in those places, or by a discussion of the mountains, and the animals and various phenomena one might find there, or through any such conversation to get the child into the right mood.

The poem calls for different voice, from the merely descriptive at first to the full tones of the second stanza and

the reverent tone of the end. It is full of feeling and vigor. It well illustrates the power of poems to increase general information and cultivate thought and appreciation.

The following are suggestive questions:

Do you know the meaning of "chaparral" or why the red deer loves it? Can you see the close, dark shelter and feel the perfect motion of that wind-rocked pine? What is an ouzel? What does "to haunt" mean? What is a rill? Why does the ouzel haunt the rills? What is a cañon? Where in a cañon are the rills found? Why does the poet say they "race" the incline? Why is the word "incline" fitting? What do you know of the Rocky Mountain sheep? Is it different from the Rocky Mountain goat we hear about, or are the terms simply used carelessly? Why are the rocks called "battered"? What does "sure foot and fleet of limb" have to do with the sheep's selection of his home? Where does the sheep sleep? Why are the stars spoken of as "going by"? What is the mountain rim? What is the mountain hem? Why are these good terms? How should you feel to be in the sheep's place at night, watching the sky and the stars and feeling safe?

Why are the rocks spoken of as "battlements"? Why "sky-built"? What is a cliff? What is a scar? What is a chasm? What made those "deep-walled chasms"? Where are the "roaring rivers"? What makes them roar? What have the rills before spoken of to do with the rivers? Did you know there were "gentian-flowered meadowlands" in this locality? Why the tamarack rather than the elm and maple? What is a crest? Had you thought of the sheep as being above the eagle's nest? Why "screaming brood"? What is a quest? Why is the sheep safe from the wolf's

quest? What difference is there in the animals found at different mountain heights?

Why "riot of the storms"? Is it meant that the snow-flakes are like stars, or are there really "snow-flowers"? Why do the cattle go to the plain in a storm? What are "howlers"? What is a lair? Why do the sheep stay on the mountain height in the storm? What does "foolish" mean in this connection? Do you feel a thrill of freedom at "free and far the wild sheep are"? Could anything leave a more beautiful, uplifting, moral thought than the final line — "And God doth shepherd them"?

Has not the child, through such a poem as this, gained in knowledge of real things? Has he not acquired new words and increased his power and desire to use them fittingly and expressively? Is not his moral nature brought somewhat nearer that perfection for which we aim as our highest goal in all instruction? This poem is one among many. There is no limit to what we may teach through poem study. Shall we not give to it its proper place in school work?

In the following list may be found some of the many good poems for school use:

The Rock-a-By Lady (Field), in Young and Field's "Third Reader."
What does Little Birdie Say? (Tennyson), in Jones's "Second Reader."
My Bed is a Boat (Stevenson), in Young and Field's "Third Reader."
Spring (Thaxter), in Young and Field's "Third Reader."
Suppose (Cary), in Wade and Sylvester's "Third Reader."
Winter, from the German, in Lovejoy's "Poetry of the Seasons."
The Child's World, in Lovejoy's "Poetry of the Seasons."
Hide and Seek (Sherman), in Lovejoy's "Nature in Verse."
The Song of the Bee (Douglass), in Lovejoy's "Nature in Verse."

Violets (Moultrie), in Blodgett's "Third Reader" and in "Open Sesame."
The Bluebird (Miller), in Blodgett's "Third Reader."
Winter in the Sierras (Austin), in *St. Nicholas*, December, 1901.
My Shadow (Stevenson), in Young and Field's "Third Reader."
A Gaelic Cradle Song, in Shute's "Land of Song," Volume I.
The Land of Story Books (Stevenson).
Seven Times One (Ingelow), in Young and Field's "Third Reader."
The Night Wind (Field).
One, Two, Three (Bunner), in Young and Field's "Third Reader."
The Lost Doll (Kingsley), in Wade and Sylvester's "Third Reader."
Japanese Lullaby (Field).
The Flag (Macy), in Elson's "Grammar School Reader."
March (Wordsworth).
September (Jackson), in Young and Field's "Fourth Reader."
October's Bright Blue Weather (Jackson).
Wynken, Blynken, and Nod (Field), in Young and Field's "Third Reader."
Ho, for Slumberland (Rexford), in "Nature in Verse."
Columbus (Miller), in "Poems of American History" (Stevenson).
A Little Breeze, in "Normal Third Reader."
The Year's at the Spring, from "Pippa Passes" (Browning).
The Village Blacksmith (Longfellow).
The Brook (Tennyson), in Jones's "Fourth Reader."
Whichever Way the Wind doth Blow (Mason), in Bartlett's "First Steps in English."
A Child's Thought of God (Mrs. Browning), in Wade and Sylvester's "Fourth Reader."
The Bluebird (Rexford), in Lovejoy's "Poetry of the Seasons."
The Wind and the Moon (Macdonald), in Cyr's "Fourth Reader."
Robert of Lincoln (Bryant), in Young and Field's "Fourth Reader."
At Thanksgiving (Larcom).
The Children's Hour (Longfellow).
Children (Longfellow).
Song of Marion's Men (Bryant), in Gayley and Flaherty's "Poetry of the People."
The Sandpiper (Thaxter), in Young and Field's "Fourth Reader."
The Landing of the Pilgrims (Hemans), in Cyr's "Third Reader."

The Legend of the Maple (Ogden), in Stone and Fickett's "Trees in Prose and Poetry."
The Rocky Mountain Sheep (Austin), in *St. Nicholas*, September, 1900.
A Song of the Sea (Procter), in "Land of Song," Volume II.
The Arrow and the Song (Longfellow).
One Butterfly (Larcom).
Barbara Frietchie (Whittier), in Gayley and Flaherty's "Poetry of the People."
The Mayflowers (Whittier).
The Bugle Song (Tennyson), in Cyr's "Fourth Reader."
Down to Sleep (Jackson).
The Builders (Longfellow).
The Fishermen (Whittier).
Paul Revere's Ride (Longfellow).
Just be Glad (Riley).
Concord Hymn (Emerson), in Jones's "Fourth Reader."
Warren's Address (Pierpont), in Hyde's "School Speaker and Reader."
The Corn Song (Whittier).
Home-Thoughts from Abroad (Browning).
The Trailing Arbutus (Whittier).
The Coast Guard (Miller), in Cyr's "Fourth Reader."
The King (Riley).
The Three Kings (Longfellow).
Centennial Hymn (Whittier), in Gayley and Flaherty's "Poetry of the People."
Opportunity (Sill), in Jones's "Fifth Reader."
Violets (Larcom).
Our State (Whittier).
The Brook and the Wave (Longfellow).
Daffodils (Wordsworth), in Blodgett's "Fifth Reader."
Autumn (Longfellow).
Recessional (Kipling), in Cyr's "Fifth Reader."
Ring out, Wild Bells (Tennyson), in Bellamy and Goodwin's "Open Sesame," Volume III.
The Chambered Nautilus (Holmes), in Jones's "Fifth Reader."
Spring (Timrod), in Cyr's "Fourth Reader."

The Charge of the Light Brigade (Tennyson), in Jones's " Fifth Reader."
Abraham Lincoln (Bryant), in Gayley and Flaherty's " Poetry of the People."
Laus Deo (Whittier).
The Christmas Silence (Deland), in Lovejoy's " Nature in Verse."
The Shepherds in Judea (Austin), in *St. Nicholas*, December, 1900.
Christmas Bells (Longfellow).
A Christmas Carmen (Whittier).
The Birth of Christ (Tennyson), in Bellamy and Goodwin's " Open Sesame," Volume III.
A Christmas Carol (Mulock), in Bellamy and Goodwin's " Open Sesame," Volume I.
O Little Town of Bethlehem (Brooks), in any church hymnal.
Christ and the Little Ones (Gill), in Whittier's " Child Life."
The Cloud (Shelley).
Spring in the Valley (Austin), in *St. Nicholas*, May, 1903.

REFERENCES

Approved Selections for Supplementary Reading and Memorizing. Eight small volumes. Hinds, Noble & Eldridge.
BELLAMY and GOODWIN. Open Sesame, Volumes I–III. Ginn and Company.
BURT. Poems Every Child Should Know. Doubleday, Page & Company.
GAYLEY and FLAHERTY. Poetry of the People. Ginn and Company.
HAZARD. Three Years with the Poets. Houghton Mifflin Company.
HYDE. School Speaker and Reader. Ginn and Company.
LOVEJOY. Nature in Verse. Silver, Burdett & Company.
LOVEJOY. Poetry of the Seasons. Silver, Burdett & Company.
MONTGOMERY. Heroic Ballads. Ginn and Company.
PALGRAVE. Golden Treasury. Various publishers.
SHUTE. Land of Song, Volumes I and II. Silver, Burdett & Company.
STEVENSON. Poems of American History. Houghton Mifflin Company.
WHITTIER. Child Life in Poetry. Houghton Mifflin Company.
WILLIAMS and FOSTER. Selections for Memorizing. Ginn and Company.

CHAPTER XVI

THE STORY

Importance. The story should have an important place in school work, as its value can hardly be overestimated. By means of it much information and inspiration may be furnished. It may serve as a marked stimulus for general reading; it may increase the pupil's power of expression; and it is very effective as a means of elevating ideals, while beyond most subjects it furnishes pleasure.

Kinds of stories. There are, of course, many kinds of stories equally good, and there should be variety of selection. Starting with those of animal and child life, which appeal so strongly to the very little child, one may arrange a gradation to meet the needs and tastes of pupils through the whole school course. The wonder and fairy story, the folk story, myth, and fable may be drawn upon in turn, to acquaint the child with nature's truths, ancient beliefs, or moral lessons. The nonsense story and information story will find a place, and biography often furnishes the highest uplift for adolescent boys and girls.

Sources. The whole field of literature may be drawn upon for the right materials. There are many collections of stories selected by people well fitted for the task, though many teachers prefer to do their own searching, using more original sources. There are collections of fairy stories, fables, and myths in great number, and these furnish an

important source of supply for the young teacher. School readers and language books give many of the well-known classics, but it is better not to use those from the children's regular readers. The teacher who can have only a few books may find her need met through some of the charming collections of general stories, like Sarah Cone Bryant's "How to Tell Stories to Children," and "Stories to Tell to Children." The latter contains more stories; the other, together with quite a number of excellent ones, gives some very helpful directions for using them. The series by Eva March Tappan, The Children's Hour, contains a large number of well-selected stories, carefully grouped as to subjects and age.

Characteristics of a good story. One usually has to find a good story through an intuitive feeling for its fitness, but there are certain characteristics which a story should possess if it is to appeal to children. There needs to be a strong central thought, and in the telling this thought should be clearly and strongly emphasized, care being used that it is not so loaded with details as to be obscured. Any over-embellishment or secondary plots which weaken the central idea should be omitted in the telling. There should be life and movement. Some interesting thing should be happening all the time. The events should also be within the experience and interest of the listener, and should not need to be much broken up by explanations. Repetition is an attraction too, adding an element of expectancy and recognition which the child, particularly the little child, enjoys.

Manner of treating. Generally a story should be *told*. The teacher gets more into harmony with it, more in touch

with the class. She is free to see how the children are taking it, to bring it home vividly, to use herself as a factor in the enjoyment. To be told, it must first be prepared. Preparation to tell does not mean learning to recite it. A recited story differs little from a read one. Stories may be said to children dramatically with extremely good effect, and this way should be used, but the ordinary teacher telling a memorized story makes it sound very mechanical and uninteresting.

The first step in preparation to *tell* a story means getting thoroughly into the spirit of it, getting to like it better, finding the heart of it — the central thought, of which mention has been made. After this, one has to pick up the ideas which best serve to increase the effect of the main points, and think how to arrange and express them. Parts need to be learned word for word. In some cases drawings, pictures, or illustrative objects add more attractiveness. If so, these need to be looked out for while the story is being prepared.

Though sometimes it is well to ask the class what they think happened next, most stories should be told connectedly. The telling should be practiced aloud, if possible, for the discovery of defects in language, arrangement, or style of presenting. This also helps the teacher to lose fear of her own voice. If she can tell a story well under these preliminary conditions, she may surely make a success of it when the magnetism of the class presence is added.

Oral reproduction. Often it is well to have the story reproduced in one or more ways. The most usual way is to have it done orally. It is better to have it told in connected form by the child or children, but questions should

be employed when the pupil loses the thread. To get the child to reproduce in smooth, correct English is one object of story-telling. Fresh from hearing the story well told, he is apt to use some of the language he heard and so make it partly his. When he talks about what he thinks of the story, he uses his own less correct forms. These should be corrected, but the corrections should not become prominent enough to be upsetting. Listening to beautiful English is a factor in acquiring it, and that means may be relied upon largely in this work, though the other should be employed also, wisely. Not all stories should be reproduced, but reproduction is valuable.

Written reproduction. Written reproduction may be used, particularly with older children. The story itself will furnish material for writing, and in connection with it many things regarding arrangement, correct expression, good judgment as to important parts, may be taught. Many attractive papers may be made if the children are encouraged to illustrate with drawings, or pictures selected from other sources.

Other forms of reproduction. Often with little children the only reproduction may be a series of pictures, drawn or cut, or the constructing of objects to illustrate the points brought out. Children take great delight in such work. It is a good plan to have a table equipped with sand and another fitted with scissors, cardboard, paints, colored pencils, and a varied working outfit, where may be constructed endless continued stories, illustrative of language and other work.

Dramatizing. Reference has been made already to one of the best forms of reproduction — dramatizing. Too

great emphasis cannot be laid upon such work. Its importance in developing powers of expression, freedom, ingenuity — which is creative imagination and executive ability — and in establishing a good spirit or moral tone is unsurpassed. Simple little helps in the line of stage settings and costumes may be used if the children themselves think them up, but often imagination is better than objects. The teacher should be sure that the pupils do the planning, not herself, though she may have to plan at first to show them how. Great care should be used that the talking and acting are spontaneous, not cut and dried beforehand. To repeat and act a memorized story with parts all laid out and every change arranged is an excellent exercise, yet it has not one tenth the value that on-the-spot acting and talking have.

Reading stories. Though the told story is usually better for language lessons, there is value also in stories read. When the language is particularly beautiful or fitting, it is *better* to read the story. Sometimes reading may be used for longer stories or, occasionally, when the teacher is pressed for time. The plan of having many stories told and many others read is the ideal one, and the teacher should be careful never to spoil the story in the telling by using the English language carelessly, nor in the reading through lack of the best work of which she is capable.

One of the great purposes of the use of stories in school is to train the children to a familiarity with, appreciation of, and fondness for good literature — one of the worthiest aims of education. Not only by her stories but by her whole attitude, her suggestions for home reading, her approval of reports of good outside reading, by opportunities

furnished and pathways opened, the teacher may so train the pupil that the dime novel and the trashy romance may sink naturally to their proper place, and the child's trained taste cause him to seek the best in the line of stories, to become an enthusiast for good literature.

The following list gives titles and sources of some stories that have been tested in many schools:

Chicken Little, in Wiltse's "Folklore Stories and Proverbs."
The Three Billy Goats Gruff, in Lansing's "Rhymes and Stories."
Three Little Pigs, in Lansing's "Rhymes and Stories."
The Three Bears, in Wiltse's "Folklore Stories and Proverbs."
The Old Woman and her Pig, in "The McCloskey Primer."
The Lion and the Mouse, in Wiltse's "Folklore Stories and Proverbs."
The Crow and the Pitcher, in Stickney's "Æsop's Fables."
The Little Pig Brother, in Bryant's "How to Tell Stories to Children."
Belling the Cat, in Stickney's "Æsop's Fables."
The Country Mouse and the City Mouse, in Stickney's "Æsop's Fables."
The Cat and the Parrot, in Bryant's "How to Tell Stories to Children."
The Fox and the Crow, in Jones's "Third Reader."
The Fox and the Grapes, in Stickney's "Æsop's Fables."
The Hare and the Tortoise, in Stickney's "Æsop's Fables."
The Little Fir Tree, in Stickney's "Andersen's Fairy Tales" (First Series).
Little Red Riding Hood, in Lansing's "Rhymes and Stories."
The Fox and the Stork, in Young and Field's "Literary Readers," Book Four.
The Little Red Hen, in Lansing's "Rhymes and Stories."
The Dog and his Shadow, in Stickney's "Æsop's Fables."
The Jackal and the Lion, in Bryant's "Stories to Tell to Children."
Little Pink Rose, in Bryant's "Stories to Tell to Children."
The Monkey and the Chestnuts, in Serl's "In Fableland."
Raggylug, in Bryant's "How to Tell Stories to Children."
The Dog in the Manger, in Stickney's "Æsop's Fables."
The Bremen Musicians, in "Child Life," Volume II.
The Elves and the Cobbler, in Lansing's "Fairy Tales," Volume II.

The Gingerbread Man, in Fassett's " Beacon First Reader."
The Lambikin, in Lansing's " Quaint Old Stories."
The Little Half Chick, in Fassett's " Beacon First Reader."
The Wolf and the Kid, in Serl's " In Fableland."
The Wind and the Sun, in Stickney's "Æsop's Fables."
The Boy who cried Wolf, in Stickney's "Æsop's Fables."
The Tar Baby Story, in Young and Field's " Literary Readers," Book Four.
Cinderella, in Lansing's " Fairy Tales," Volume I.
The Fisherman and His Wife, in Noyes's " Twilight Stories."
The Golden Touch, in Dillingham and Emerson's " 'Tell It Again' Stories."
The Queen Bee, in Wiltse's " Grimm's Fairy Tales," Part I.
The Little Jackal and the Alligator, in Bryant's " Stories to Tell to Children."
The Pied Piper, in Jones's " Fourth Reader."
The Goose that laid Golden Eggs, in Stickney's "Æsop's Fables."
Puss in Boots, in Lansing's " Fairy Tales," Volume I.
The Steadfast Tin Soldier, in Stickney's " Andersen's Fairy Tales " (First Series).
The Lark and her Little Ones, in Blodgett's " Second Reader."
The Moon in the Mill Pond, in Wiltse's " Folklore Stories and Proverbs."
Epaminondas, in Bryant's " Stories to Tell to Children."
The Frog and the Ox, in Stickney's "Æsop's Fables."
The Miller, his Son, and the Donkey, in Stickney's "Æsop's Fables."
Rikki-tikki-tavi (Kipling), in " The First Jungle Book."
Sleeping Beauty, in Lansing's " Fairy Tales," Volume II.
Snow White and Rose Red, in Young and Field's " Literary Readers," Book Three.
The Pea Blossom, in Stickney's " Andersen's Fairy Tales " (Second Series).
The Honest Woodman, in Stickney's "Æsop's Fables."
The Bell of Atri (Longfellow), in Jones's " Fifth Reader."
The Little Hero of Haarlem, in Richmond's " Second Reader."
Aladdin, in Lane's " Arabian Nights."
The Brahman, the Tiger, and the Jackal, in Young and Field's " Literary Readers," Book Four.

The Ugly Duckling, in Young and Field's "Literary Readers," Book Three.

The Legend of Saint Christopher, in "Language Lessons from Literature," Book II.

Rip Van Winkle, in Cyr's "Fourth Reader."

Ichabod Crane, in Baker and Carpenter's "Language Reader," Book VI.

Robert of Sicily, in Bryant's "Stories to Tell to Children."

The Red Thread of Courage, in Coe's "Fourth Reader."

The Nightingale, in Blodgett's "Third Reader."

The Gulls of Salt Lake, in Bryant's "Stories to Tell to Children."

The Griffin and the Minor Canon (Stockton), in "Fanciful Tales."

Old Pipes and the Dryad, in Young and Field's "Literary Readers," Book Four.

The Great Stone Face, in Jones's "Fourth Reader."

The Nürnberg Stove, in Carroll and Brooks's "Fourth Reader."

Hiawatha (Longfellow) or Hiawatha, the Indian Boy, in Young and Field's "Literary Readers," Book Three.

The Happy Prince, in Keyes's "Stories and Story-Telling."

Bruce and the Spider, in Lansing's "Patriots and Tyrants."

King Alfred and the Cakes, in Blaisdell's "Stories from English History."

King Canute, in Blaisdell's "Stories from English History."

Richard the Lion-Hearted, in Blaisdell's "Stories from English History."

Beowulf, in Holbrook's "Northland Heroes."

Hercules, in Francillon's "Gods and Heroes."

Achilles, in Shaw's "Stories of the Ancient Greeks."

Ulysses, in Shaw's "Stories of the Ancient Greeks."

Perseus and Andromeda, in Shaw's "Stories of the Ancient Greeks."

Pandora, in Shaw's "Stories of the Ancient Greeks."

Baucis and Philemon, in Comstock's "Dramatic Version of Greek Myths."

The King of the Winds, in Richmond's "Second Reader."

Dædalus and Icarus, in Shaw's "Stories of the Ancient Greeks."

Horatius at the Bridge, in Jones's "Fifth Reader."

Hannibal, in Harding's "Story of Europe."

Damon and Pythias, in Shaw's "Stories of the Ancient Greeks."

The Golden Fleece, in Shaw's " Stories of the Ancient Greeks."
Apollo, in Shaw's " Stories of the Ancient Greeks."
Clytie, in " New Education Reader," Book III.
The Last Lesson, in Bryant's " How to Tell Stories to Children."
Joan of Arc, in Lansing's " Patriots and Tyrants."
William Tell, in Fassett's " Beacon Third Reader."
Roland, in Lansing's " Page, Esquire, and Knight."
King Arthur Stories, in Greene's " Legends of King Arthur and his Court."
Norse Myths, like Thor, Balder, and Loki, in Litchfield's " The Nine Worlds."
American History Stories, as those of Lincoln, Washington, Franklin, Putnam, Marion, John Paul Jones, Boston Tea Party, Signing the Declaration, Making the First Flag. These may be taken from any history or historical reader, for example, Blaisdell and Ball's " Short Stories from American History."
The Colors of the Regiment, in " Aldine Fifth Reader."
The Taking of Quebec, in Cyr's " Fifth Reader."
The Soldier's Reprieve, in " Aldine Fourth Reader."
A Golden Deed, in Wade and Sylvester's " Fourth Reader."
The Rescue of the Garrison, in " Aldine Fourth Reader."
The Queen's Pardon, in " Aldine Fourth Reader."
The Perfect Tribute, in Howe's " Fifth Reader."
Dorothea Lynde Dix, in Buckwalter's " Fourth Reader."
Waterloo, in Jones's " Fifth Reader."
A Brave Cabin Boy, in " Aldine Fourth Reader."
Battle of Bannockburn, in Blodgett's " Fifth Reader."
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The First Grenadier, in Carroll and Brooks's " Fourth Reader."
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Nauhaught, the Deacon (Whittier).
The Shepherd Girl of Nanterre, in Wade and Sylvester's " Fourth Reader."
Bible Stories, like those of Daniel, Samuel, Moses, Joseph, Samson, David, Noah, Esther, The Talents, The Debtor, The Sower, and The Good Samaritan, and The Christmas Story.

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CHAPTER XVII

GEOGRAPHY

Importance of subject. No school subject furnishes to either teacher or pupils greater opportunity for variety, enjoyment, and profit than does geography. A surprising number of teachers express themselves as hating and dreading it, but it is really no more worthy of either than is the dessert that accompanies a good dinner. The hate and dread arise from a feeling of the breadth and importance of the subject and of inability to handle it properly, but if one jumps boldly in and proceeds to do one's best, its discouraging features furnish the greatest encouragement. It is so broad, so interesting, so important, that out of it good will come even if it does not come very logically.

Geography was for altogether too many years regarded as a memory subject merely, and stress was laid only upon location of places. The pupils went through the book and reviewed it, without reference to outside reading, with no idea of connecting with nature study or language, with thought power deadened rather than strengthened, till it is no wonder that it seemed hard and unimportant. No subject furnishes a broader field for observation and general knowledge. No subject will develop thinking more if an effort is made in that direction. In none is there a greater opportunity for interest if the children are encouraged to talk freely and ask questions. None can be more illuminated

by means of objects, pictures, easily available reading matter. All that is needed is for teacher and class to get into the right attitude concerning it.

Preliminary work. Geography proper need not begin below the fourth grade, but material contributory to geography may be amassed from the moment the child enters school, through the general discussions, the nature study, and the language work. The nature lessons with their study of plants, minerals, animals, and natural phenomena; the language work with stories of different peoples, animals, and occupations; and those stories illustrative of the workings of nature may fill the children full of a simple, usable knowledge regarding the occupants of the world and their relations to each other and with the world materials with which they have to deal.

Early work: oral. When children have been three or four years in school they should be given a good course in oral geography. This may come preferably at the beginning of the fourth year, though in rural schools, if it is more convenient, fourth- and fifth-grade pupils may well take the work together. Some time during the year it might be well to read "Our World Reader," though this reading should serve to supplement rather than to direct the course. If wished, when a combination of fourth and fifth grades is made, the reader might be used one year and the oral course the next, thus getting a good grounding in geography without monotonous repetition.

The work should be development, which is dismaying in name only, and the lessons should be founded on the material already gained through the nature and language lessons and incidental observation and reading. Direct

observation should be employed in connection with the daily lessons, and work may well start with the home section and expand naturally to include the world.

Map making and reading in this connection. A certain ability to read and enjoy maps is necessary, and this must be based on study of plans and maps. Simple little plans may be made of the school building, school grounds, the neighboring locality, and — if the teacher feels able — of the town. These may be drawn on board or paper or constructed on sand tray or table. They may be rough or as elaborate as the teacher and children wish. Their purpose is largely to lead the child to see how things are portrayed in maps. This knowledge may be increased by studying a map of the town or county, if some home in the community can lend it, and by the reading of other maps—all of which may be done in a very informal way. The difference between a map and a picture must be made plain, and the child must get a little idea of drawing to scale. Work of this kind should occupy only a few weeks at most.

Study of surface features. As soon as possible the children should be started on interesting home topics. They may learn all the local surface features of land and water — *hill, plain, valley, cape, peninsula, isthmus, island, spring, brook, river, pond, lake, strait, coast.* Whatever it is possible to observe should be observed directly. Certain supplementary work may be done by means of mud pies in the school sand pile, or by the sand tray or table.

As these smaller features are studied, the child's knowledge may be extended to include the world features, — those given above, and also *plateau, mountain, bay, sea, ocean, basins, systems, tides, waves, harbors, coast line,* — all

those things which may come smoothly to his knowledge in oral lessons, through enlarging, diminishing, and putting together in new combinations the results of what he has seen. Pictures are an inestimable aid in understanding such things, but they must be accompanied by explanations from the teacher, by free discussion by the class, and by as much descriptive reading as possible.

Order of procedure. For one day's lesson a child may observe such surface features as are within reach. He may talk about his observations for another lesson. Then he may model in the sand what he has seen and the larger related type. If, for example, he has seen a hill and valley, he may model these, together with mountain and valley, mountain system, and mountain range. He may continue his work by drawing the various features on board or paper. He may look to see them illustrated in pictures that the teacher shows, then he may find the same features in other pictures, and finally he may learn how they are represented on maps and globes.

Climatic conditions. He must be introduced to climatic conditions, but they will prove not strange, since he has always observed the weather and, if his school has been right, has kept weather records and talked about clouds, fog, mist, rain, dew, snow, ice, and hail in connection with the appearance of each. From these the teacher should lead him to the larger forms that he may not have seen. He may learn of evaporation and precipitation; trace moisture from the vapor through cloud, fog, and rain. It is not difficult. A few experiments, which the teacher may easily think out or get acquainted with through books like Ricks's "Object Lessons" or many similar ones, will lay open the

whole field. It is not a hard journey for a child's imagination from the parched ground during our seasons of drouth to the desert places; from our snow to the snow of the Arctic regions; from our fogs to foggy Newfoundland; from our snow, melting and freezing on roofs, to the Alpine or Greenland glaciers; from our pieces of ice, breaking up and sailing down the gutter streams, to the icebergs of the colder zones. The child will move breathlessly along the geographical current, and the teacher will grow breathless too, with ideas and enthusiasm.

If the pupil be shown by means of a candle the outward and inward currents in the room, if he recalls the upward heat current from stove and bonfire, he is ready to think out the effect of the sun upon the different parts of the earth. The candle and the globe or apple will show him how constantly the sun shines on the equator; his bonfire suggests the upward current of air; he sees how air must rush in to take the empty place, and is launched upon the question of the seasons and the winds. He may make a weather vane with a knitting needle, a piece of cork, and a paper vane. He may make it work by blowing it. It is easy to see that if the wind blows it, it will act in the same way. He may be made wildly interested in the destructive effects of winds and in the Life-saving Service. Relation of winds to rainfall, of rainfall and slopes to drainage, of drainage to products and occupations, may all be thought out — much better thought out than told or read.

Relation to man. "What is it all for?" "Why, for man." "How does man live? How do the people in this locality get a living?" The child sees speedily that no man can live by his own efforts with comfort, that he himself

is dependent on a thousand others for what he needs. Man needs food, clothing, building material, heat, and such things. He cannot get them all by himself, so he does what he can, and others also do what they can, and then exchange goes on. All the world is engaged in getting raw material, as by hunting, fishing, farming, caring for flocks and herds, lumbering, mining; or in preparing raw materials by manufacture; or in exchanging raw materials and manufactures, which we call commerce.

The child may start with what his section does in either of these lines and spread out from these to the work of the world. He will learn why great cities spring up in particular places, why other regions are sparsely populated. He should make product maps, collect objects to illustrate various manufactures, bring in all the pictures touching upon these topies. Any teacher might be aroused to enthusiasm by finding how many pictures may be collected easily, to show lumbering, mining, wheat raising, cotton growth and manufacture, or a hundred other things. Why should one "hate and dread" to teach geography, when it is so difficult to do it wrongly if one keeps in mind the idea of enlarging the child's knowledge of the world, increasing his interest in it and his thinking power?

As an aid in understanding commerce, the pupil should learn about roads, bridges, railroads, lakes, canals, rivers, ocean steamers. He may start with his country road and market wagon, but that should not be the end of his journey. Time-tables for railroads and steamers may be employed in this connection. Various ways of transportation, centers of exchange, different people engaged, should enter into the study.

Following the start with the leading industry of his section, he may study the size and growth of his town, then of important places in his country or the world. In the same way he may start with his town or county government and the nationalities represented in his locality, and keep going outward from that as long as time permits.

He may make imaginary journeys, carry on imaginary correspondence, and come out at the end of the year enthusiastic and knowing considerable geography. Of course all this work is taken very simply. The outline is broad, — the teacher needs a broad outlook, — but the children are small, and at the end of the year's work one expects a beginning to be made, around which we may get a great geographical growth in the rest of the school course.

Other plans for oral work. Nor is the plan just outlined the only one by which the early work may be done. Many teachers make all the lessons type studies of various kinds, taking, for example, the Mississippi Valley; the Great Lakes, Erie Canal, and Hudson River; Niagara Falls; Egypt; Switzerland; and many others; each being treated as a type, serving for the interpretation of other sections. Dr. Charles A. McMurry, in his various books on geography, makes excellent suggestions, and Carpenter's readers are full of good material. There are many ways of approach that will surely create interest, establish right ways of going to work, and furnish abundant general information for further use as the geographical work continues. With the possibility of work of this kind being done, how can a teacher be satisfied with a few set, formal questions and rote answers as a substitute for real geographical achievement in lower grades?

Geography with a book. The child, having looked the world over a little through his year or so of oral geography, is ready to begin work with the book, but that does not mean that the book is to be given him as a substitute for everything else. Too many teachers think their whole duty lies in assigning a lesson and then hearing it recited. The book should only supplement class work. The regular work in class should be carried on in a manner only a little different from that employed before the book is used. Each advance lesson should be taken usually in class in the form of development work, then the pupil may be sent to the book to get additional information and to review and fix what has been taken. Not all parts of the geography are of equal importance, and the pupil should be trained to select the most essential parts as being the important ones. This is the part that is usually emphasized in the development, so the lesson furnishes needed training. Growth in power to recognize the essential comes surely though slowly from such work, and geography is better fitted than many subjects for training of this sort. Full and free discussion, in which the child questions at will and states his own opinions, will be of great advantage in this connection.

Location of places. Location of places is important, and work in this line should be given. It should not be taken in place of other, more needed work, nor should the teacher judge it necessary for the location of all the small rivers, lakes, mountains, or towns in many sections to be learned. When beginning the study of a country the pupil is often interested in observing minor features, but this should never be carried to the extent of requiring memorizing of

them. A pupil should, at the end of his course in geography, have a working knowledge of the situation of all really important places. He should also know the location of smaller places important in his section of the country, but for a child to be expected to know the situation of places of minor importance throughout his entire country or the world is manifestly absurd.

Aids in the work. Field lessons should still be emphasized, and type lessons may well be used in connection with the study of countries. The large outline map, made of blackboard cloth, is very useful. Maps and globes should be employed. Map drawing and modeling are excellent helps. The children should make outline maps and also relief maps. For these last, one may use flour and salt in equal quantities, mixed with water to the consistency of bread dough. This will harden and may even, after a time, be colored with water color. Clay may be used also, and putty, and papier-mâché made by soaking, till they form a pulpy mass, newspapers which have been torn into bits. Plasticine may be used and is a good material in that it will serve many times. The easiest medium is the sand, and that will fill the need in a large number of cases. Modeling sand is best, but any will do.

The product-map idea may be enlarged here. A big map may be made, and the children may bring samples of all the products peculiar to localities, and these may be fastened to the map with glue or thread. A map of this kind will do more to fix facts and enlarge interest than will any amount of book study alone. The pictures and illustrative objects should be used whenever they fit the case. It makes no difference if they have appeared many

times before in the same or other connections. The play idea is a help, and many games should be introduced. These may vary from lists of printed questions which are to be answered, to those like shiploading with proper products at certain places or "I am thinking of a river beginning with *A*."

Use of different books. With older classes usually more than one book should be used for studying the lesson — more than one geography, and, if possible, geographical reading books and the scrapbook of clippings. It is a good idea to follow a book, but not to limit the work to one book alone.

Emphasis of causal idea. As the children grow older, there should be more and more thinking, more tracing to sources and causes. No child should finish the subject of geography without knowing South America, Europe, Asia, and the other continents, in comparison with North America. They should be able to locate various corresponding regions in the different countries, corresponding causes producing like results. They should have such a careful causal study of North America that they may be almost able to work out the geography of the other continents from the map and what it shows of physical conditions.

Reviews with older classes. The higher grammar-school classes, instead of reviewing the single big book over and over again, should study largely by subjects. They should get acquainted in the broad with the United States and with a few of the more important countries in South America, and in Europe, Asia, and Africa. Aside from the general study, little attention need be paid to the less important countries. Much study of types may be done in

the advanced classes. Fishing, lumbering, agriculture, commerce, different forms of manufacture, may serve as subjects, the work starting with the raw material and tracing it to its various destinations. I once saw a most interesting and profitable lesson on *coal*—the localities, mining, varieties, transportation, being discussed at length. The class grew brilliant and excited as they talked of the various great coaling stations of the world. The amount of reading that must have been done was astonishing. In the same way, iron, wool, cotton, wheat, and many others might be taken as general subjects. They would be equally sure to create enthusiasm and produce much research. In these general lessons many places indicate lacks which call for reviews of various things already taken once, and the review comes with a will because it fits to something seen by the pupil to be needed. Travel may also come in as a way of reviewing. If a teacher takes her class to journey through England or France or Russia or even through Europe generally, they get at the main things in a picturesque way, and the final year of geography might well be introduced to the children under the head of A Year of Travel. In this way conditions of climate might be reached, the reason for the development of particular industries and growth of particular sections, all the main geographical facts, in short.

Toward the very end of the work it is well to review one's own group of states, but these should be taken as a general study, not by following the plan of the book. When the question of occupations in the section is reached, location of chief centers will come of themselves naturally and be far more interesting to the child than if he learns

book lists of places with the things for which they are noted. Near the end of geographical study, also, a little general survey of mathematical geography is often productive of good.

The teacher and books as sources of aid. The teacher must ever know more than the pupils. She must inspire them to read, but she must read more. She must make them think, but she must think more. She must teach them to know what the book says, but she must know it sooner and better. No one can teach geography without justly hating and dreading it if she never prepares her lesson, hears the class with book open, follows answers with her finger, openly hunts for places on the map, and either guesses at pronunciations or slyly looks them up in the back of the book.

Advanced work in geography calls for books, and someway, either through the school library or the public library, the generosity of friends, the common sense of school officers, or the devotion of teachers, they must be had. One should as soon think of teaching any trade without tools, of teaching to sew without cloth, needle, thread, and thimble, as of teaching geography with next to nothing to work with or with no time and effort on the part of the teacher.

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CHAPTER XVIII

HISTORY

Introductory. History ranks with geography in interest and in power to train the reason. It adds to this, great power in an ethical direction. Yet many children, particularly girls, never like history, many do not think one real thought in connection with it, and many more fail to get its ethical lessons. A taste for history is born with some people, but it has to be cultivated in a far larger number. Very few children fail to be interested in people, and out of this interest may grow a real fondness for history. When the age of pleasure in heroes and adventures arrives, history may be made the largest contributory subject.

Story-telling a foundation for history. The story work, even with little children, may do good service. Many of the history stories are better suited to older children, but the very youngest school pupil may find enjoyment in stories of the colonial children or of Indian life; may grow eager over Pocahontas and John Smith, Columbus, Washington, Lincoln, Marion, and many others. I have known of boys brought up on these stories, who at six or seven knew more history than many high-school graduates; they made it enter into their lives and dominate their plays.

History reading. History reading in school follows the story-telling. There are many supplementary readers that give good history material, and the child never fails of

interest. These books may be used to furnish subjects for language work, or they may serve for silent reading, or they may be employed for regular class readers. It is maintained that most class-reading work should be directly in the line of literature, but history and literature are so interwoven that history readers may well be classed with literature. Though this chapter has reference to United States history largely, yet this may be a good place to say that history reading and stories should not be confined to work with the United States. Greek, Roman, medieval, English, *all* history has been served up in story form and presents a fascinating field for school reading.

The reading of history stories should be accompanied by free and long discussion, by dramatization, and by as much outside reading and investigation as possible. Every encouragement should be given toward introducing this with other school subjects into the children's out-of-school play. Pictures and illustrative objects should be made to do full duty in class, and the map should be in constant use in connection with this reading.

Regular history study. If enough history reading is introduced with the younger classes, the pupil, by the time he has reached the seventh grade, is ready for some pretty good history study. It is better to keep both history and geography through the seventh, eighth, and ninth grades, alternating with each other, rather than to study either one exhaustively and then leave it entirely.

Early work in history proper should be detailed and, as far as possible, biographical. Once get the children into the full tide of interest through days of work on the Indians, Columbus, Cabot, Hudson, Miles Standish, John

Smith, William Penn, and the like, and they will sail along stanchly and blithely through all the work. The Indians, while perhaps not of great importance in some ways, are worth their weight in gold as a means of starting history classes enthusiastically.

What to emphasize. It is better to study the more important explorers and colonies carefully and fully and just glance at the others, rather than to study all a little. Attention should be given to the life of the people — in the various colonies, at the close of the Revolution, at the beginning of the Civil War, at the present time. Wars should have less study than has been usually given them, and emphasis should be laid on causes and results. Great movements should be traced from their beginning to their culmination. Topics leading to present-day interests should be carefully discussed. Dates should not be given great prominence. A few important ones, and power to reckon others from those, are all that is needed.

Local history. It is very important that children should know the history of their own state and locality, so enough time should be put upon local history so that the pupils may become well informed regarding it. Nor should the effort end with this. A permanent interest should be established, which the future may be trusted to increase. There seems to be no better way toward starting a child on the road to good citizenship than through study of the various elements which go toward the making of his neighborhood. Work of this kind may make a pupil grow to feel that he himself may do something which may count historically.

It is not difficult to find material for this study, since state, town, and county histories are common and one

may get access to many records. Historical societies are always glad to help in the education of children, and their collections are often valuable. Older residents are usually willing to talk to the pupils, singly or as a whole, regarding changes, or past customs or events. For nearly every state there exists at least one supplementary reader containing in attractive form the most important happenings in the life of the state.

Verbatim recitation. Word for word recitation should never be permitted. History has been studied in this way too long. Many a child has gone through school never realizing that this was not the best way, simply giving out words, of which he might know the meaning indeed, but for whose meaning he cared not a jot. From such recitations one almost never brings away the meaning of the whole thing, the relation of one part to another.

Topical study from more than one book. Verbatim recitation may be avoided by the habitual use of more than one book. If the teacher wishes, one text may be taken as a standard and others employed in a supplementary way, but to get at the heart of the thing, there is no way so good as to present the subject by topics, with reference to pages of several books, and let the children forage for the subject matter. Results at first may be meager, but training remedies that, and a clear idea of the perspective of history, a knowledge of the relative importance of various facts, the reasoning, the power to learn by one's own research, will grow and strengthen rapidly.

How to get the books. The books necessary for such study will come in various ways. It is as cheap to buy four histories of five kinds as twenty of one kind, and no

objection is usually raised to buying books enough to go around. The teacher will have a few of her own. The children will bring a few from home. The school library will furnish one or two, and the public library others, perhaps. If the books can include a few elementary histories, they will be of value since the children of less power will get about all they can master from these. The history readers also will do their part.

Discussion in class. In the lesson time, discussion and questions should abound. The children should ask all they want to, and if no one can answer, so much the better. Everyone can hunt for the answer for the next day. There have been classes in which the children did almost all the questioning, with profit. The teacher's questions should include many like the following: "What would you have done?" "Was that right?" "What was the other side?" "What would have happened if such a thing had been done?" The Civil or the Mexican War, rightly handled, may do more to teach reasoning and develop moral judgment than much arithmetic and many Sunday-school lessons.

Maps, and correlation with geography. As previously said, maps should be made prominent. The maps in the books, outline maps, chart maps, and blackboard maps may be employed. It is absurd to teach such things as the opening of the Mississippi, Sherman's march, Dr. Whitman's journey to Oregon, the purchase of Louisiana or Alaska, and the discovery of gold in California, without the use of the map as the very foundation of the lesson. Such things as Paul Revere's ride and the battle of Lexington call for the blackboard map in addition to the usual chart.

Often a whole geography lesson or series of lessons may be given as a preparation for special history work. The Panama Canal furnishes an illustration of this, or the study of Cuba and the Philippines in connection with the Spanish War; and no possible understanding can be obtained of the difference in character of the early settlements in the North and the South or the different attitude of people toward slavery without a clear knowledge of geographical conditions.

A correlation of history with geography should be made whenever possible. This correlation should not be confined to a few particular lessons. The tendency of children to learn, and of teachers to teach, detached facts in all subjects makes the need imperative that teachers shall use earnest effort to connect lessons of to-day in any subject with those of last week, last month, or even last term — a time which seems to children to be so remote as to be absolutely unconnected with present needs.

Pictures, poems, and stories. Pictures will never fail if the teacher realizes their importance, and many of the pictures easily obtainable are best suited to history work. Pictures of people, places, and events are all valuable, and a picture once used should not be put aside but used again as soon as possible.

Poems and stories are very helpful. Many of our most beautiful and stirring poems deal with historical facts and hauntingly fix the facts through the tendency of the poem to force itself repeatedly to the front in thought. Many poems too long to be learned may be read to the class. There are also many little stories, not directly containing the historical facts, which yet are so associated with them

as to be a help in learning and liking history. Many books so handle historical material or give such vivid pictures of the times or so portray some great character in history that calling the attention of the children to them will serve as a large means for doing more effective work.

Reviews. Reviews in history are of the greatest value, but in all reviews those are the best which are incidental and which approach the subject from a different point of view. Studying history by topics, from different books, furnishes many excellent reviews, as the different material is gone over endlessly, and as one meets the man again or surveys the event in the light of those to which it led.

Training gained through history. History should train to reasoning power. The child should find the central thread upon which the events are strung and by which they are held together. It should train to power to talk. It should lead to habits of investigation. It should teach ethics — power to see the other side, to judge of the right and wrong, and to choose the right regardless of consequences. It should teach patriotism, love of great deeds, love of freedom.

Preparation of teacher. If the teacher can create in her pupils a love for history, she will have gone far toward attaining all the above-named results. To do this she must know her subject. The trouble with many young teachers is a lack of knowledge. They know each day's work well enough, but have no large grasp of the subject. In a sense, they know little more than the children themselves. Study and thought are the only things that will remedy this condition. Reading biographies of leaders, studying such books as Gordy and Twitchell's "American History Pathfinder"

or the report of the Committee of Eight on the study of history, reading European history as well as American, all such things will help. What is most needed is a passionate enthusiasm for the subject, just what we need in all subjects. This makes willingness to work. It is vastly more trouble to teach history in a right way, but, on the other hand, it brings vastly more satisfaction. No teacher succeeds in any subject without exertion, without a profound giving of herself.

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CHAPTER XIX

NATURE STUDY

Introductory. Nature study furnishes the country teacher's opportunity and may become a joy to any teacher who goes about it in the right spirit. The term "nature study," as used for work commonly done in school, includes much of elementary science, and its teaching often develops a real scientific spirit in the child. The teacher should aim in her work to get the pupil into a sympathetic attitude toward nature, and opportunities are all about her for producing such an attitude. He should be made interested, observant, inquisitive. He should ask more and more questions daily, and to many of these he should obtain answers for himself.

What to include. The problem of how to begin is serious only because there are so many good ways of beginning, so many good things with which to start. I should say the teacher had best begin with what most interests her, but if she prefers, she may begin with what most attracts the children with whom she has to deal. The prominent nature interest of the locality furnishes a good starting point. The only absolutely necessary thing is that some start be made. The teacher should select for subjects useful things mainly, but secondarily she may teach whatever the child wishes to know. In village or rural schools much of the work should lead finally and more or

less directly to agriculture. The ground includes work with plants, animals, minerals, and natural phenomena. As helpful in connection with these, one gets simple little bits of physics, chemistry, geology, and astronomy.

Plant life. What may the child wish to know, and be helped by the knowing, in plant life? His first interest may come through flowers, or sprouting seeds, or budding twigs, or fruiting plants. In either case he finally gets to thinking about the whole subject, and one place of starting is as good as another. He has to recognize the parts of a plant and the cycle of its growth. He must learn that the plant usually consists of root, stem, leaves, blossoms, and fruit; the whole growth-process taking place, he discovers, in order that seed or what answers for seed may be produced, so that a new plant may be made in turn. Here the little child finds the first big wonder—all these pains that new plants may come. The wonder is bound to grow, and it seems one of the principal needs in the study that nature's large and wonderful plans should stand out as clearly as possible. The little pupil early learns the parts of the plant, the place and manner of their growth, and the general use of each part to the plant and to man. Around this early knowledge may be grouped the later in any convenient order.

Fall work with plants. If the teacher's first start in the school comes in the fall, she finds demanding attention most insistently such things as the preparation of the trees for winter, the changing and the falling leaves, the ripening of the fruit of the trees—not the fruit trees alone, like the apple and the pear, but the nut trees and all others whose fruit matures in the fall. Here will develop more of the wonder as one begins to investigate to see

if all trees have fruit and how they come by it—a problem to be answered partly by present observation, partly by memory, and partly to be stored up for future answering another year. Nature is a great continued story.

The pumpkins, squashes, cucumbers, beets, turnips, onions, potatoes, all the fall vegetables, may be worked upon and are very interesting now.

Here the child wonders again as he finds so many ways of storing nourishment for future use—in the seed as pea and bean; in the root, as the beet and turnip; in the bud, as the onion; in the stem, as the potato. Not only children but grown people also are surprised to find that the potato is not a root. They use the argument that because it grows under ground it must be root, but learning that only stems bear buds and branches and finding the branches growing in the form of sprouts in the axils of embryo leaves on the potato, they accept the fact and grow doubtful of believing that all things are so because they have always thought them so. Children call the onion a root for the old reason, but taking one apart they find the parts look like leaves, and an opening is made for a story, the end of which may be suggested when they study some big terminal bud on a tree in the spring. In ways like these they are trained to minds open to conviction, eager to grow to new beliefs.

Surprised to find what they have taken for roots to be something else, "Are there many underground stems?" they ask. "Let us find out," says the teacher. "Are they always thickened?" another problem for solution. The beauty of it is the fact that observation through a long time is required for the answer to many of the questions.

The child finds out that some of his enemies are these underground stems; for example, the grass that creeps along under ground and seems to say "Thank you" when you cut it up with a hoe, because you have made a lot of sturdy little plants and saved it the trouble. Other aspects of stems will appear as the work goes on, and the child is always interested in them. Study of bare branches teaches him that nature does not take chances. Careful preparation for next year is made before the winter comes. Indeed, getting interested in nature's foresight is a large means of training to thoughtfulness.

Seed dissemination. Not the least interesting part of the fall plant work is the dissemination of seeds. If seeds are collected, it makes a never-ending source of pleasure, and the child's wonder increases as he finds them catching rides on people's clothing and animals' fur; being borne along by the wind; snapped, as out of guns, by the opening of the seed cases; or scattered by animals. Here he becomes interested in the attractive appearance of the fruit — its color, odor, taste — and in the observing that these attractions do not appear till the seed is matured. He observes the abundance of seeds produced by weeds and learns the value of destroying the weed before it has time to mature.

He begins to get a reason for protecting birds, without whom there would be so many undesirable plants. Seeing the great number of seeds borne by the weed and the power of such a plant to live, though its seeds be so tiny, he may be made to understand that many little things, well or ill done, will more than balance a few large ones.

Winter plant study. Winter study may include certain of the work suggested for fall, like that with vegetables and fruits, but winter is not without other means for plant study, though most of this work may be better done in fall and spring. One of the best things for winter study is furnished in the evergreens, which are interesting because they stay green when other trees are bare and because of their connection with Christmas. The child may find out whether the tree actually does not shed its leaves; may account for the peculiar growth of the tree through arrangement of the buds, follow out the growth for several years, think of reasons for the characteristics of the tree fitting it to its place of growth, observe the buds and cones. He finds the need of supplementing this observation by memory of the summer and by further observation next summer. Trees, leafless in winter, may also be studied now.

In the winter the pupil will be interested in studying bulbs and other plants grown indoors, if such work is possible under the conditions at hand. Such plants add greatly to the pleasure of school life, since out of doors is so devoid of bloom. In the winter also may be studied many commercial plants — cotton, tea, tobacco, wheat, rice, sugar cane, and those that have a marked influence geographically. Certain specimens may be obtained, and much shown by pictures.

Plant study in the spring. Spring opens the door again to an abundance of plant study. The child is eagerly ready to see how the seeds he has observed in the fall get about their work in the spring. He marvels that they can do it so quickly and gets his eyes open to the reason — a question of care for the future again, stored food making the

problem easy. He is much pleased at discovering the little plant all prepared, the different ways in which the food may be packed. He sees seeds sprouting everywhere, wonders at bare places anywhere, and so learns to find the enemies of plant life and guard against them.

Study of budding twigs comes early. They may be brought indoors and their development watched day by day. Nature's ways of protecting the buds appear; hard scales, gum, wool, unpleasant scent — every precaution against cold, wet, insects, and other enemies. He finds that some of the buds make flowers, some develop into leaves, others contain both flowers and leaves. He learns that flower parts are altered leaves, finds out that buds are undeveloped branches, and so has a way to account for many problems. He sees that trees blossom. This was left over from fall for answer. The continued story is telling itself. Later he finds out about the fruit of some that have puzzled him before. Many a mother at home is surprised to know that all the trees blossom. They have never been quite aware of it till their attention is called to it by the children's interest.

Much interesting work may be done in the study of the little common plants of field and roadside and flower garden. The spring flowers are simple, largely. The composites the child should be taught to recognize as little bouquets. Transplanting brings new lights. The things necessary for growth appear more clearly, and the results of crowding in garden or forest, with reasons why plants must be kept, if possible, from losing leaves. Knowledge of many of such things will come naturally and easily. Planting seeds and transplanting bring the pupil naturally

to other ways of propagating. He gets interested in the strawberry bed, in making layers and cuttings, in grafting, in producing changes through careful selection. Luther Burbank becomes a wonderful man to him. The moral lessons to be drawn are worth the time taken, if we count no other values. Many experiments may be tried regarding conditions necessary for plant growth. Seeds may be started on damp blotting paper, sponges, sawdust, and in soils of various kinds. They may be kept in the dark; the light; bright sunlight. They may be kept very wet; moist; or dry. They may be planted in sand, clay, humus, or in loams in which sand, clay, and other ingredients are prominent.

Mineral study. This leads naturally to investigations of various kinds of soils, the treatment needed by each, and mixtures that are profitable. The problems of worn-out soils, rotation of crops, favorite soils for different plants, are ones the child is pleased to work upon. Places where particular soils may be looked for, and the making of soil generally, will be good for research questions. The study of soils is closely interwoven with that of plants.

Other interesting mineral study may be taken in connection with quarrying, mining, manufacturing. Slate, coal, granite, limestone, any of the building stones, and any common minerals may be studied. This should fit in finely with the geography work. The metals are good for study and give a strong field for experiment work which delights the child. The metals occur so frequently in connection with daily living that it is necessary that children should have a good, reasonable acquaintance with their possibilities, their limitations, and the right ways of using

them. Such mineral study as may not be taken in connection with the plant and animal study may well occupy some of the time in the winter term.

Animal study. Study of animal life may go on all the year round. Much of it may be done in direct connection with the plant work. Part of it may form the subject of separate study. The work should include the common domestic animals — cat, dog, horse, cow, pig, and hen; also any pet animals, like the rabbit or squirrel; and the common household pests, like the rat, mouse, fox, and weasel. The domestic animals of other countries should be studied — the elephant, camel, llama, reindeer, Eskimo dog. These last should be taken in connection with their work in the life of the people. This is closely connected with the geography study.

Mode of working. Certain animals should be taken as types, and the others studied with reference to the type. The cat and dog, for example, may be taken as types of two classes of flesh eaters; the horse and cow as plant eaters; the squirrel or rabbit as gnawers. This study may be done partly by schoolroom observation and partly by assigning observation to be done out of school. No set form of study need be followed, but the pupil should learn to see how closely physical structure and habits are related. The start may be made with the structure or with the habits. Studying the cat, for instance, the child learns that the animal is so built that it may best get its food and prolong its life. Starting with the food, one gets at the teeth, tongue, keenness of smell, feelers, eyes, feet, covering. The cat catches its prey usually by night; it crouches, creeps, springs — unlike the dog, who boldly

hunts his down. Each is so made, physically, as to be adapted to its mode of life. The pupil finds it interesting to compare cat and dog in structure and way of living. Starting with the home animals as types, the children may later easily understand the more common wild animals that are relations of these, such as the wolf, lion, tiger, bear, and deer.

The study of animals should include a knowledge of the good and ill they do and of certain obligations that belong to the children. The gnawing animals being destructive, the good they do must be weighed with the harm. Many of them are useful for their fur covering. Many of them are almost wholly harmful, and extermination must be their fate. The cat helps in the destruction of mice and such vermin, but she carries diseases and must be looked out for. The cat also does great harm in destroying birds, who are our benefactors because they eat millions of harmful seeds, insects, and worms each year. If we weigh good and ill and decide to keep cats or other pets, it is our duty to care for them. Having made them dependent upon us, we have no right to leave them to shift for themselves, to forget to give them food and water, or to fail to make provision for them when we go away for the summer. The child needs to know such things, and he, in turn, may teach his mother.

Smaller forms of animal life. Study of the common smaller forms of animal life, — like the fly, mosquito, ant, cricket, grasshopper, beetle, bee, moth, — should be made prominent. Children are intensely interested in such study. These forms should be observed for their structure and manner of development and particularly for their work in

hindering and helping man. Such work will justify itself if, for instance, only a few children are awakened to the need of guarding themselves from the mosquito in such ways as by drainage and by looking after breeding places. A single child, who is moved to pour kerosene on the barrel of rain water or overturn or remove tin cans or bits of broken crockery that may harbor stagnant water, may teach a whole neighborhood or at least make it less uncomfortable. A roomful of children, taught the deadly work of flies and the need of excluding them from our houses or at any rate from our food, may by and by have a perceptible effect upon the death rate.

Study of smaller animal forms may in certain localities include study of the home pests in the shape of bugs of various sorts. In many homes this trouble will never be reached so well as through the schools. The instruction being given in a general way, no offense can be taken. The children may be aroused to the way these things are regarded and stirred to do away with them. They should be taught that absolute cleanliness is the first requisite, and that constant watchfulness and care must be paid as the price for decency and comfort. The study of bacteria should not be omitted, and many helpful truths may be driven home in this connection.

Continued schoolroom observation. Much observation may be done from day to day in the schoolroom. Crickets and grasshoppers may be put, with a big sod, on a plate under a common wire fly screen and there observed through all their changes. The tiny grasshoppers, hatched from the eggs laid in the sod and so small that they can slip between the wires, prove a source of great interest. Bits of

apple, fresh grass, and such food, must be provided, and watch must be kept, that the little visitors may not be uncomfortable. Seeing how voraciously they eat, helps one to understand their destructive power.

Cocoons, brought in during the fall and kept in the schoolroom, furnish much pleasure. In general the larger worms, or larvæ, are the best for the purpose. When they are found crawling they are about through with their feeding in some cases, but it is safe to put in leaves of the plant near which they are found. They may be kept in a box covered with mosquito netting. It is better to put in some earth, as many of them spend the pupa state in the ground. Butterflies may sometimes be fed on sugar and water, which they will take from the finger if it is offered by gently touching the finger smeared with the mixture to the coiled sucking tube of the little creature.

The observation of the schoolroom should always be supplemented by outside work. The pupil should be taught to observe all possible insects for the work they do—such as eating vegetation; destroying other forms of animal life; assisting, annoying, or endangering people; helping fertilization of plants by means of carrying pollen. This aids him in deciding which forms should be destroyed and which protected.

Children should be trained not to fear needlessly, nor yet to handle too freely; this because of danger to health and also for fear of unintentional cruelty. Kindness should be emphasized. Nothing should be tortured, nothing kept in the schoolroom without proper care. Teachers are often more careless in this last respect than children, being frequently known to neglect animals brought in for study.

The aquarium. An aquarium in school is very valuable. These may be made and stocked quite easily. Directions for making are well given in Hodge's "Nature Study." Articles in the *School Arts Book* for October, 1904, and September, 1909, give excellent suggestions for their care. I have used for the schoolroom some made by Hodge's directions, some goldfish globes, and various glass dishes. These dishes may serve also as vivariums. In these have been kept fishes, tadpoles, snails, turtles, newts, lizards, clams, and, for a while, tiny snakes, in which the children became much interested. The most satisfactory receptacle we have found to be the rectangular aquarium described by Hodge. Though it is difficult to get a perfectly self-adjusting one, it is comparatively easy to have one that will serve the purpose. Little water plants may be found in any brook or pond, and they adapt themselves easily to the conditions. It is better not to try to keep too many kinds of life together, nor to have too large specimens.

Bird study. Of all forms of animal life, perhaps none so interests the children as birds. Observation of them must be carried on largely out of school, but in-school talks will help such observation. From the first grades, where a flower-and-bird calendar may be made from the children's descriptions of birds and flowers seen, to the highest grades, where systematic observation may be reported, there is no lag in the interest. The bird-and-flower calendar may consist simply of the names, put in the calendar squares in place of the figure for the day they were first seen, or the more ambitious teacher may have the picture of the bird, insect, or flower in colored crayons. Bird study may include the teaching of many things that will make birds

more comfortable, such as making bird houses, knowing what to do when little birds are found, and feeding when food is scarce. Desire to protect the birds will come with the knowledge of their attractiveness and of their use to man.

In general it may be said that all forms of animal life are of great interest to children, and by acquainting them with the part of each in the economic life of people one may do a great work for the future.

Natural phenomena. Work in natural phenomena belongs with nature study and has been referred to already in connection with geography. Weather observations, simple study of air and water in their various manifestations, much work of this kind, may be done casually; and much more in regular geography lessons.

Time and place of nature lessons. It has been indicated that much of this work is really so connected with geography and physiology that it may be taken with those subjects. Much more may go along with the language and reading and be closely connected with the drawing. Considerable may be done at opening-exercises time, morning and afternoon; and Friday afternoon gives an opportunity for the work. Very much may be taken casually, a word here, a hint there. In schools with crowded programs — rural schools — a good way of giving it is to assign certain questions for which answers are to be found. The answers may be discovered in the woods, the field, the pond or brook, by the roadside, in the home or school garden. The little ones may find what they can, the older ones more. They may learn at recesses, at noons, on their way to and from school, and the younger children will find it

an interesting means of occupying themselves when they are sent out during school hours. Study of certain things may continue for days or weeks. Jackman's "Nature Study for Common Schools" suggests many excellent questions.

Experiments. Simple experiments may be carried on day by day. These may be concluded immediately, as when we melt lead or make a filter; or they may go on for a long time, as when we develop twigs or grow seeds or watch butterfly changes. The experiment appeals directly to the senses and therefore furnishes one of the best means of teaching. It also calls for strong exercise of judgment and of reasoning. Incidentally it trains to truthfulness.

The apparatus needed for such experiments is usually very crude, but children may make apparatus for rather complicated experiments in physics if the teacher is sufficiently interested to encourage them. Electric lights and bells, steam engines, water wheels, pumps of various sorts, are often the product of rather small boys.

Aids. Pictures, drawings, and specimens of many kinds may be used helpfully in this work. They need not be beautiful, nor elaborate, but they should be exact.

General. No teacher is expected to do all the work here indicated. Abundant material is suggested, from which choice may be made. The main thing to produce is interest in nature. Out of this will come the other things. Nature study will increase knowledge, being one of the best information subjects in the curriculum. It will train mentally — to observation, expression, judgment, reasoning, habits of investigation. It lays the right foundation

for correct memory and inventive imagination. It teaches a love for the beautiful and develops the habit of exact truth-telling. It teaches sympathy, mercy, kindness, abundant reverence, and, beyond most subjects, it gives pleasure — pleasure in the present study, and future pleasure by arousing the child to the wonders of the world about him. It means work for the teacher, though not so much as she thinks. And after all why should not the teacher work?

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CHAPTER XX

DRAWING

Neglect of the subject. Drawing is a subject still neglected in many schools. This neglect is due partly to lack of time and partly to the teacher's ignorance either of its value or of ways of going about it. Drawing may be handled in such a way as to take very little of the program time, if one so chooses. It may be used mostly in connection with the regular subjects of the school day, and much of the child's work may be done during his study periods. Suggestions may be made by the teacher without directly encroaching upon the other work. If the teacher who is doubtful of its value, or who feels uncertain of her ability, will but make a beginning, she will find enthusiasm and power increasing rapidly. Of course it is much better, when circumstances allow, to have a regular period for drawing, and in most schools this may be arranged for, without cutting unduly into time needed for other work.

Interest, the first step. First, the child should be made interested in drawing. One of the best ways to produce this interest is for the teacher to draw as freely as may be, in connection with all lessons. Crude little sketches that illustrate the work being taken are very effective and may be done by most teachers, even those not greatly gifted, as often not much artistic power is needed to secure what is wanted. Teachers should not hesitate to make attempts

to illustrate. Usually the children are not critical, the subjects being taught may often be made much clearer, and the child is almost sure to get an interest in trying to draw for himself. The little child is not afraid to draw anything. If he is encouraged to advance, he easily grows into the habit of using this means of expression as freely as talking. "I can't easily describe it, but I can show you with the crayon," may come to be the attitude of many children instead of one or two.

Interest being aroused, we have found a sure way to get the pupil to draw and have also discovered some subjects for him to try. In addition to class illustration of oral work, he may draw to illustrate all his papers on various subjects. He may make large sketches on separate sheets of paper to accompany the written ones, or he may make little sketches on the written paper itself. This idea expanded gives us the booklet to which reference has been made elsewhere. It has a marked effect in producing good papers.

Sources of subjects. Much work may be done in drawing. Subjects may be found everywhere. Spring and fall flowers, fruits, vegetables, sprouting plants or twigs, seed vessels of all kinds, weeds, grasses, anything in plant life, may be used. This work springs out of the nature study easily and may be much employed in that connection. Study of nature also suggests landscape pictures of all kinds, from sunset and single trees to a rather elaborate composition. Along with the nature study may go pictures of all forms of animal life, — insects, birds, and the larger animals, — the drawing to be done from the objects themselves usually. Drawing, as springing out of

the language work or forming a basis for it, suggests representation of all forms of activity and life and so opens a broad field. The daily happenings in the life of the child give him for subjects common household utensils, toys, children in various poses, and special celebration features as suggested by the fair, the circus, Memorial Day, Washington's Birthday, or Christmas. His industrial work gives abundant chance for drawing. He draws plans for objects, selects color schemes for them from nature, and works out as many as possible of them with suitable materials.

Many things which are often treated under the head of drawing have been here touched upon under Industrial Work, Desk Work, and in other places; but it should be remembered that all sides — paper folding and cutting, modeling, coloring, constructing, illustrating, picture study, everything of the sort — belong with the drawing and serve to make a correlation possible between it and most school subjects. Under the drawing also may be included much work like that suggested in the general exercises, like flower selection and arrangement, study of pleasing vase and pottery forms, practice in choosing related objects for groups, study of attractive effects in house decoration and in dress, with many like things which may serve to improve the taste of public-school children and through them of the people at large.

Material. As many mediums of expression as possible should be employed in the drawing. The one that best expresses the required idea is the one to use. Some things call emphatically for color, while others tell their story better through aid of the pencil. Sometimes one has to

employ the medium that is available, and sometimes different members of a class may work with different tools. The common cedar lead pencils are capable of much, and several degrees of hardness may be found among them, though most of them are soft and work well for ordinary representation.

Colored pencils and colored crayons, such as are found in boxes for a few cents, work splendidly. Of course more expensive pencils and crayons are better — Dixon's, for example, furnishing an excellent medium. It is to be remembered that many of the crayons are injurious, or even poisonous, if swallowed, so little children should be cautioned constantly about putting them in the mouth. Many children have little boxes of colored crayons or paints at home, which they are glad to bring for use at school. In one school the children aroused to interest in the work brought colored crayons, then water colors. The idea spread, and soon all were working, the teacher learning with the children. Water-color paints are very satisfactory for use, and many of them are cheap. Though it is nice to have really good colors, the cheaper ones may be made to serve very well. Good gray pictures, or pictures in "values" as they are now called, may be secured by the use of common ink and brush — a medium easily obtained.

Most drawings should be made upon sheets of paper of varying colors, shapes, and sizes. These are far superior to books in every way. The cheapest manila drawing paper is of greatest general use, since it furnishes a rather soft background color and takes pencil or paint easily. The blackboard should be employed also, and blackboard

sketching is fascinating work. Many striking effects may be produced with the side of a bit of white or colored crayon used boldly upon the board. Whitney's book called "Blackboard Sketching" furnishes many suggestions for board work.

The children should be cautioned to use care and neatness in handling materials. It is well to provide blotters and pieces of soft cloth, that all sloppy work may be looked after immediately. Even ink spilled upon the floor may be largely removed with blotters followed by a washing with clear water, if the accident is attended to at once. If left, one has to have recourse to sand papering or scraping with glass.

The lesson. In giving the lesson, the teacher should apply her common sense and pedagogical knowledge. She should expect the children to do the best work of which they are capable and should direct the lesson to the best of her ability, not merely give out materials and then leave the class to meet all the problems alone. She should give certain general directions from time to time, but most of her suggestions will need to be individual. These should be given in a low tone to each child. It is not necessary for all to hear every direction, and a constant running fire of suggestion and criticism not only confuses the class as a whole but renders it dull to those directions which it is really necessary for all to hear.

The teacher may often take the brush or pencil and show the child how to get an effect, but nearly all the work should be done by the pupil instead of by the teacher. Assistance should be divided. It is not wise to work too long with one child. Constantly the children should be

made to *look* at the object they are trying to draw, and the teacher should not so interpose herself between them and it that they cannot possibly see it. When a pupil secures a good effect he should be made immediately to put down his tools. If he does not, he soon sees another touch to be made that will probably spoil his picture. It may often be put at once on exhibition, to stimulate the rest of the class.

Drawing should train to artistic power. Drawing is supposed to train the child's artistic power; the teacher should try to have it do so. In arranging objects for drawing, care should be used to make the arrangement pleasing. There are good and bad ways of pinning a spray upon a sheet of paper to serve as a model. Teachers should train themselves to look for the pleasing way. There is a great difference in the shapes of paper required for different objects. If the specimen seems to call for a panel, the drawing should be so made. There is a difference in the kinds of lines needed to produce effective drawings. For example, mechanical drawing calls for a hard, fine line; while in outlines, what is wanted almost always is a very soft, broad, gray line, better made with the side of the pencil. Often teachers permit the children to grip the pencil tightly and to produce hard, black lines, with no attention to beauty lost thereby. A hundred little ideas regarding things like these may be picked up by any teacher if she observes good drawings, which are easily to be found in these days, and studies the various helps in books which are also easily obtained. The Prang Textbooks of Art Instruction furnish a great deal of help to a teacher, and the *School Arts Magazine* contains much information and inspiration.

Nevertheless, without such aids it is perfectly possible to get pretty good drawing results if one sets about securing it from the children as a means of free expression. The little people should draw from observation, memory, imagination. They should tell stories of various sorts by means of the work. The teacher should have high ideals and *expect much* from the pupils. She should not be in the mood expressed by "That 's pretty good for a small child" or "One can't expect much from babies" any more in drawing than in writing. She should demand reasonably good work, though she may often fail to get it. Some of the results will be startlingly effective. Most of the drawings will be only moderately good considered as works of art, but power may be increasing. The eyes of the child are opened to see; the hand becomes skilled to tell; the brain, which presides over both eye and hand, grows steadily in power. Though an occasional child can never learn to draw, yet even in such a case the time is not wasted.

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CHAPTER XXI

WRITING

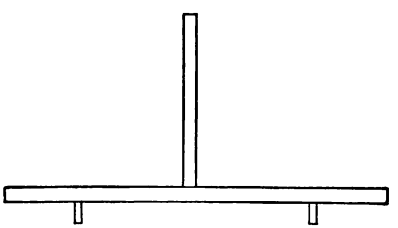
Writing not to be begun too early. Children should not begin to write too early. During the first weeks in school there are so many ways in which they may gain knowledge without tax that it seems wiser to omit writing altogether, but when the work is well established, *getting ready* to write may be begun. First- and second-grade children have no business to write too well. Their work, instead of presenting copy-book perfection as it too often does, should have the same relation to the finished writing product that a child's drawings at this age usually bear to the results obtained in advanced classes. This does not mean that the teacher should not have high ideals, but that she should not expect muscular control. She should want the child's best, but not unreasonable marvels. Doing small writing calls for such tense muscular adjustment that it proves a fertile source of trouble for the eyes and the whole nervous system. Watching a little child who is working freely with pencil or crayon, one observes that he makes wild, aimless movements, producing nothing in particular, — a mere snarl of lines, — but that he works with a large swing of the muscles always. Watching a class of little children write, one sees them shaping each letter with great care and working, usually, with movements of the fingers only. There is a place where the first-described movement ends and the

child really tries to make something, but there is a distinct difference between what he does naturally, even at this time, and what he is often called upon to attempt in his writing lessons. Children have little need of writing as a vehicle of expression below the third grade, so the work for the first year or so should consist of preparation for future writing rather than writing itself. Teachers usually set their standard for lower-grade writing too high, just as they place it too low for drawing, expecting almost perfect formation of letters in writing but accepting daubs in drawing without surprise. We need a readjustment in both cases.

Character of the writing. Thought of the child's natural mode of development brings to mind that the brain centers that govern the large muscular movements develop earliest. Thought of what we wish to obtain in higher-grade writing suggests that, freedom of movement being then desirable, we may early work along natural lines with profit. Recent ideas governing the teaching of writing are following this theory and making the work consist largely of exercises tending to produce muscular freedom and control. For this work, use should be made of crayon and blackboard and later of large sheets of unruled paper, with the big kindergarten crayons or extra-large writing pencils. These implements the child may grasp with his small fingers, without the viselike grip with which he holds the ordinary pencil. His writing may be as big as he pleases, and if crooked, it is no matter, since it will grow smaller and straighter as rapidly as is necessary.

Yet, to help in getting uniform size and straight writing easily, after a few weeks of absolutely free work at the

board, it is well to make lines from four to six inches apart, between which the movement exercises may be made. These lines should be placed low enough so that the child may reach without difficulty, and he should stand at arm's length from the board. Above each pupil's space should appear a copy of the required exercise, and it is better for him to watch the teacher as she makes these copies. The lines may be drawn very quickly if one makes use of a music-staff marker or a similar marker which a teacher may make for herself. All that is needed is a little wooden frame that will support two crayons at the desired distance apart — simply a stick for a handle, fastened to a stick with two holes bored through it.



After a short time part of the writing may be done on paper which has been creased to indicate the width of space for the exercises. The spaces should be kept broad for a long time, because if they are made narrow, the child falls at once into a finger movement. Till writing with the free-arm movement has become mechanical, broad spaces are absolutely necessary.

Introduced to writing in this easy way, the little pupil may do many of the exercises which are employed in advanced grades. He may make free-hand circles, right and left ovals, and all the usual movement exercises. After a little while he may begin to make the letters which involve the movements taken, doing first the exercise, then the letter. Ovals connected in a line — *eeee* — prepare for letters

like *l* and *e*; this exercise — *nnn* — for *m* and *n*; its reverse — *uuu* — for *i*, *t*, *u*. This work should all be of good size and freely drawn. The pupils will naturally make their writing exercises with a bold, free movement. The teacher should never forget that its purpose is to secure muscular ease and power. One who watches it is surprised to see how easily the freedom of movement comes and how gaily and with how light a touch the child strikes in the letters. The ease attained with only a few weeks of practice is quite marvelous. When the pupil takes the various exercises readily and can apply them to letters, he may begin to write words.

The method of doing the writing need vary little as the work goes on. No essential change is necessary. The writing grows finer, the lines straighter, the letters more perfect in shape. The pencil gradually grows a little smaller, though a large implement is always better for writing. The pen, by and by, is substituted for the pencil.

To start a child writing at once with a pen is to equip him with the most difficult instrument at the start, which is contrary to the usual way of going about the taking up of any subject. When the pen comes into use, a penholder which is rather large at the base is better than the small one. The Boston guard, a rubber that has three flat places where the thumb and two fingers are to rest and that is fitted to the penholder, is an excellent device. This may be used far enough in the grades for correct pen holding to become mechanical.

Position. The pupil needs to sit erect with feet on the floor. The position in which he faces the desk has advantages, though some use a slightly sidewise position. The

shoulders should be kept level. The right arm should go onto the desk far enough to allow of free movement, and the left should also rest there lightly. The left hand should move the paper as needed. The writing books and manuals give many good illustrations, and by means of these the teacher may easily learn correct positions and a right order of progress. It is often well to give general directions for position, though here, as well as in the drawing class, directions for individual betterment of position, movement, and form should be given quietly to the individual alone. A nervous child is often greatly harassed by the continual grind of the teacher's voice and also grows so used to the sound of it that he fails to listen all the time to what she is saying. Because of this, directions are not heeded, and the pupil is blamed for what is really the teacher's fault.

Precept, example, and constant practice needed. The teacher should write much upon the board so the children may see what is wanted and how to get it. It is easy to do good board work with a little practice. Enthusiasm on the part of the teacher will produce enthusiasm on the part of the child, which is a particularly important thing in learning to write. If a pupil wants to write well and is told how, he will usually become able. Power to control and guide the muscles is of more value than perfect writing, yet more and more the child should be brought to a state of mind in which he desires most earnestly not only to write easily and rapidly but also to write well.

It is not sufficient to write in a correct way during the writing period and carelessly for other exercises. All writing should be done as well as possible and as quickly as is compatible with good work. Writing is needed as an

implement, and one should learn to use it as a means of as rapid expression as may be.

Often, in grammar grades, rapid growth brings inability to control the muscles, and the effect shows in the writing. The teacher should understand this and have patience, yet in a kindly way she should bring the pupil to the place where he may be depended upon to write his best.

The teacher's example should encourage neat, careful writing. Many teachers present such poor writing in all their work as to completely destroy the value of the writing lessons. Others put on formal board work carefully, but any writing for illustration of the points of the lesson is done hastily and carelessly. Precept and example should go hand in hand, and the teaching should be continuous. It is worth much time and trouble to make the children skillful in the art of writing. To write easily and well is an accomplishment that produces great satisfaction in life after the school days are over.

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CHAPTER XXII

MUSIC

Ways and means. It is surprising to know how many teachers have no music in their schools, not even in connection with morning exercises, and how many others have it only in that connection. Musical power is in a sense a heaven-bestowed gift, and people lacking it are to be pitied, but even nonmusical teachers may have music to a slight degree in school if they are willing to work for it as much as for other things. Many teachers who regard themselves as unfit to teach music have sufficient latent power so that a few lessons might qualify them to do some simple work in the subject. Others, who lack power to sing but have a musical ear, may teach the children by note, using the pitch pipe and presenting all new exercises and songs by note from the board, book, or chart. There are usually in school some really musical children, and judicious use may be made of these, having them sing the exercises as a model for the others. If the teacher is absolutely lacking in both voice and ear, sometimes she has to frankly say so and to intrust whatever work is done in music to some older child who is gifted in this line. She should not make the mistake of resigning the whole thing in such a case. She, herself, should discipline her school and furnish teaching suggestions and stimulation as in any other class.

Need of stimulus. Too often both teacher and pupils have the idea that since music is an æsthetic study and appeals so strongly to the feelings, it need be attended to only as the children feel like doing it. This is wrong. Music often has to be pounded in, in the face of indifference or even opposition. All methods should be sought for here, as in connection with other subjects; every legitimate stimulus to learning should be employed. The pupil should bring to his music class the same sense of responsibility as well as the same feeling of pleasure that he brings to other subjects. Strong appeal should be made to the feelings, of course. The child should want to sing and should feel the advantages that come from music.

Character of work. The work with the little children should place emphasis on rote songs, so selected as to give drill on the scales and easy intervals. Often these songs may be accompanied by motions for the sake of adding interest. In addition to the rote songs there should be drill upon scales and intervals — simple little exercises that get the pupil into the easy habit of singing freely and with fair correctness. Work should be done through all the grades in perfecting the child in the theory of music, though stress should be laid throughout on the singing of songs. He should have practice in both reading and writing in the different keys, advancing as rapidly as his powers permit. Exercises should be given from board and chart as the children advance, and it is well to base the work upon some good system of school music; otherwise it is apt to become very haphazard and devoid of results.

Though most of the singing should be by the school, class, or division working together, yet frequent opportunity

should be given to all children to sing by themselves. If this work is begun early, the child no more fears to sing than he fears to draw or read before others. Monotones, though discouraging, are not incurable. The first-grade pupil who sings in a monotone will not be the star singer of the upper grades, but he may very likely by that time have acquired sufficient power so he may keep with the others. He should be given much individual practice and some out-of-school work. The child who cannot sing well usually sings lustily. There is every reason for his singing but no especial reason why he should drown the others out. He, with all the others, should be impressed with the idea that loud singing is not always the best. From the very beginning emphasis should be laid upon sweet, true, light, musical tones — not loud singing but sweet singing. This idea once started should never be forgotten.

Perfection not to be too early expected. It is not to be supposed that children will early learn all the keys or that they will learn to read music easily, any more than we can be sure they will do long division correctly after the first presentation, but continued drill, holding the child responsible, will in time produce good results. Even if these results may not be obtained, one can accomplish the great aim of music in our schools — the giving of power to sing songs and to appreciate them.

All should sing. When the boys get to the age when they stop singing, they should be made to go on again. There is no reason why they should give up singing any more than reading or any other school exercise. When the voices get uncertain, care should be taken, but it does not usually hurt the big grammar-school boys to

sing with the rest. At this time they may be stimulated by the teacher's personal influence, by their desire to sing when they go to college, by the reminder that music is part of the required work of the school course, and in many other ways. Nevertheless, it is not well to drive boys out of school because at the balky age they feel that they cannot do anything in which they may not distinguish themselves. The teacher's object at this time should be not so much *good* singing as *some* singing. Classes may be permitted at this stage to sing songs rather than exercises, if songs are what the children like, and to sing songs attractive to them rather than some others, though the line should be drawn outside of mere street songs. There are varieties of good music.

Treatment in rural schools. In a rural school the children may be formed into two divisions, and the daily music work may include the singing of songs by the school, then exercises with each division on alternate days.

Tactics of the music recitation. During a singing lesson the children should sit in an upright position, not lounging or stooping, and the lesson should go along with the zest and precision that mark any other school exercise. In music particularly, the pupils should be kept in a happy mood. Stimulated in the right way, they will sing with all their souls and hearts as well as with all their little voices. Music furnishes sufficient change from other lessons so that it may sometimes be taken when children are tired and in need of change. The hard drill exercises, however, should be given when the class is fresh and ready for earnest work. The teacher must needs keep herself in the right mood if she is to make of the lesson all that can be made of music.

Training in appreciation. Music ranks with literature and drawing as an efficient help in keeping a school in a right attitude and increasing in the children the upward impulse which is so helpful. This subject is probably surpassed by no other save literature in its power to give pleasure, so it becomes the teacher's imperative duty to train the children by every possible means to musical appreciation. In these days of opportunity we are greatly remiss if there grows up a generation that prefers "rag time" to the music of the masters. The talking machine brings excellent music within easy reach, since there is hardly a neighborhood in which it is not represented. In a certain school a Victrola concert, given in school hours once a month, furnishes the greatest delight to all the assembled grades. Each concert brings smaller children escorted by smiling hosts or hostesses. Parents also appear, because the children "like the music" and so urge attendance.

No teacher should hesitate to ask anyone in the neighborhood to share with the children her pianola or talking machine. Of course the calls should not be too frequent; the entertainment should be at the convenience of the owner and presided over by her. With all courtesy the teacher should make it plain that she wishes the children to hear at these times only the truly good selections. Any teacher who has tact can convey this information in a way which will give no offense. If piano or organ be the only instrument at hand, much may be done by means of either of these if the player be one who has a fair execution and a trained taste. If none of these things are to be obtained, one may perhaps find some one with a true, sweet voice, who will occasionally come in and sing for the children.

One never knows till she asks how willing people are to do things for the schools. We beg favors for churches and for societies of all kinds, and there is no reason why we should not ask also for the schools, which are the most important organizations that exist in any community.

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CHAPTER XXIII

DESK WORK

Need of desk work. In the rural school particularly, but also in any school, there is a large amount of time during which the child is not directly engaged in recitation. As he grows older he becomes more and more able to get knowledge for himself from books, but even an older child gets this power slowly, and the little one has it not at all. His time outside of recitation must be wasted, and worse, unless some means be found of employing him in such a way as to train him to right-working habits and furnish him a means of learning. In the old-time school this problem was unsolved, but the modern education has reached it through what is called *educative desk work.* Even rather lately this work was regarded as useless or, at its best, as only a means of keeping the children happy and out of mischief; but one who really studies the subject makes the desk work as truly a way of instruction as is furnished by books — often a much better means than that furnished, even to older children, by books alone.

A child needs to be developed along all lines. He needs to learn the habit of concentrated attention, of digging till he has accomplished something, the habit of success. He needs skill with his fingers and power to direct his fingers. He needs training in nice discrimination, noticing resemblances and differences, and he needs direct training towards

skill in reading, number, drawing, language, music, and all the school subjects. Desk work, properly planned, will give him all of these. Work may be selected that will both directly and indirectly teach these subjects last mentioned. For example, a child may have for work the building of sentences from words, that is, *direct* instruction in the reading line; or he may have work which trains him to a knowledge of form—*indirect* instruction toward reading power, since all power to read depends upon ability to discriminate minute differences in form of letters and words.

Teacher should see purpose of work. The teacher should regard her desk work as work and important work, not as something to show off with. Unless she so considers it, she should not use it. It should be educative, given with a direct purpose. When it has served this purpose it should be discarded. A first-grade child may get power by matching cut-up pictures, but when he can put them together fairly well they have served their purpose for instruction; they simply amuse, so usually there would be little value in assigning cut-up pictures to a third grade. The same holds true of other lines of work. Discarding desk work as outgrown does not always mean putting it aside. It may mean using it in another way. A child may match tablets by color, shape, or size, in the first few weeks of school, and he may get good training in the third grade by arranging the same tablets suitably for a border or surface.

Variety necessary for interest. Interest needs to be kept up constantly, so drill for the same purpose should be given in different ways. A class needing drill on number combinations to twenty might find the answer tablets

to tablets with the number combinations written vertically, like this $\begin{matrix}3\\3\\6\end{matrix}$, or horizontally $6-4$ 2; or they might build the combinations, as $6+3=9$; or they might find all the combinations whose answer is a certain number. These tablets might be made with the hectograph or with black calendar figures or with colored calendar figures or with words. By means of such variety, interest is heightened and the varying tastes of the children are all met. The boy who would never without a struggle do his number work, which usually consisted of copying combinations and writing the answer, thought the work with vertically arranged combinations to be matched to the answer the very best of all the desk work. One of the troubles in using desk work with children just entering school arises from the inability to teach as many kinds of work as are needed to keep the children employed without doing the same over till they are weary of it, a matter needing careful planning on the teacher's part.

Need of explanation. If desk work is to accomplish its mission, it must be understood by the children, and time for explanation may well be taken from class-work time. It is a profitable investment, as the child is introduced through it to a means of drill that he may work at for many hours independently.

How to be regarded by the child. Children often fail to do the given work. Failure arises from not understanding how to do it or sometimes through a feeling that it does not amount to much. The child should be made to see its importance, to regard it as his work and its accomplishment as worth while. This attitude is helped by the

teacher's showing her sense of its value, through seeing that it is done and approving its satisfactory completion. If she does not look at it, there is little incentive to the pupil to work. A cursory glance and a word or two produce satisfactory results.

The child should be expected to keep at his work till it is finished, and the signal for completed work should be folded hands. Such do no mischief. The teacher should remember that little children accomplish tasks very rapidly and that half the troubles in school come from the fact that not enough work is exacted to keep the children as busy as they can be, every minute. Children will do varying amounts of this, as of other work. It is well to give out a second kind to be done when the first is finished, though this is not always necessary.

Decision as to kind. The kind to be done should be decided by the teacher, who should try to apportion it so that drill in the different subjects will be furnished — work leading to arithmetic for one period, reading for another; spelling, drawing, and other subjects, coming along in turn. When special drill is needed in a subject this kind of work should be increased. If choice is left with the pupil, he emphasizes the kind he likes best and often neglects the kind he needs. Sometimes, however, a choice may be given, particularly as a reward.

Work should be attractive and hygienic. All desk work should have elements of beauty and should be so planned that it cannot harm the pupil physically. Beauty, in a child's eyes, usually means variety and brightness. Bright little pictures to be matched to words, and colored pegs, sticks, and tablets rather than plain ones, are, then, the better thing. No work should be given that can strain

eyes or nerves because of dimness or size. The hectographed tablets should be brightly printed; the letters, figures, and slips upon which the work is written should be large. Stringing tiny beads, sewing with fine materials or with tiny perforations, underlining known words in the print of ordinary newspapers, and all such things are criminal work to give.

Use with older grades. Desk work is intended mainly for little children. The first, second, and third grades use it most profitably. Sometimes older children do not want to do it, because it seems like baby work. Sometimes they are eager to secure the fun of it. There are some kinds of work well adapted to larger pupils, as some of the music material, some of the arithmetic, and much of the language work. Selecting from a box of miscellaneous words those that are names of objects, those that describe objects, or those that express action is excellent drill. Finding the words that make the subjects and those that make the predicates of given sentences, arranging comparison of adjectives, principal parts of verbs, and conjugation of verbs furnish work which would do no harm in the highest grades.

Sources of material. The desk work may largely be made with hectograph, development paper — oak tag — stub pen, colored paper, calendars, little pictures from magazines or other advertisements. Older children may make it for the younger as a part of their industrial work. Desk work may be bought from the various firms that deal in such materials, — like the J. L. Hammett Company, the Milton Bradley Company, and D. H. Knowlton & Co., — but usually the necessary work can be made.

Care of material. The material may be kept in envelopes, in little boxes, or — some kinds — in one large box. The little-box way is best, and discarded thread or silk boxes may be obtained at any store. The dealers will save them for a teacher who explains the purpose for which they are to be used. A set of small boxes of one kind of work may be kept in one large box for convenience in distribution. Each little box should be labeled and numbered. If the tablets of each box are also numbered to correspond with the box, the sorting is made easy, as one can see at a glance where each piece belongs. Several times a year in a small school, as often as possible in a larger one, the desk work should be gone over and put thoroughly in order. Older pupils may do much of this, certain pupils having charge of different kinds of work. Breaking, marking, stealing the work, should all be looked out for. Many a moral lesson may be given through this means.

Distribution of work. The pupils should usually distribute and collect the work. It saves the teacher's time and furnishes training for the children. They will do it awkwardly at first, but that is a greater reason for their doing it. The little people to whom the boxes are given should be trained to let them alone till told to open them. The teacher may explain how the material is to be used and then give the signal for opening the boxes. To wait for this signal is a training to self-restraint that in itself is of value.

No teacher who has carefully worked out the subject, planning work to meet the needs of a class and observing the results gained by use of the various kinds, will thereafter need to be urged to make educative desk work fill a large place in her primary teaching.

A FEW KINDS THAT ARE PARTICULARLY USEFUL

For Reading

Rhymes and words. The child to build the rhymes or put the word tablets upon corresponding words of rhyme. These may be both written and printed, and type sentences in prose may be substituted for rhymes.

Tablets, containing pictures — colored, uncolored, or hectographed — together with written or printed words. These are to be matched to tablets containing written or printed words.

Tablets containing pictures only. These are to be matched to tablets with words. A step in advance of the preceding work.

Written and printed words which are to be matched to each other.

Tablets containing common words. These are to be used in building sentences.

All of these may be used during the sight reading. When reading by the phonetic method is reached, the child may continue all of above work and may have the following in addition:

Letters, to build words.

Initials, to match to endings to build words.

Words and letters, to match the letter to the word beginning with it.

Words containing a common element, to match to cards having the common element only.

For Language and Grammar

Much of the reading material.

Pictures with words below, to write story containing words.

Pictures without words, to serve as a basis for a story.

Tablets with parts of speech, to put in groups those which are usually verbs or nouns or adjectives or other parts of speech.

Singulars and plurals.

Adjectives — positive, comparative, superlative.

Verbs — principal parts.

Pronouns — declensions.

Words, to build sentences for drill on correct forms, like "It is I," "Whom did you see?"

Abbreviations, to match to words.

DESK WORK

For Arithmetic

Tablets with number combinations written vertically, to match to answer.

Tablets with number combinations written horizontally, to match to answer.

Tablets containing single figure or sign, to build combinations and answers.

Tablets with numbers and signs, to build multiplication tables.

Matching dominoes.

Finding equivalents in dominoes.

Cards with varying number of holes punched, to match those having the same number.

Tablets with numbers, to arrange in order as in counting.

Tablets, to build tables of denominate numbers.

Equivalents in denominate numbers to match; for example, 1 qt. = 2 pts.

Measures or surfaces, to find equivalents in measures or surfaces; for example, an 8-inch length to be matched to a 6 and a 2, to a 7 and a 1, to four 2's.

The desk work in number may be varied by using written and printed words or figures, by making with hectograph, or by employing black or colored calendar figures.

Many modifications of suggested work may be made.

For desk work also, the pupils may do many things such as are mentioned under the class drills in number, like making the multiplication tables in squares or constructing magic squares. Such work is to be found illustrated in most books on elementary arithmetic.

For Geography

Tablets with counties of own state, to arrange alphabetically.

Tablets with cities of own state, to arrange alphabetically.

Miscellaneous tablets, to pick out the ones which name rivers, seas, bays, cities, capes, or islands.

Tablets, to match states, capitals, and largest cities.

Names of states, to match to products.

Cut-out maps, to put states or countries in proper places.

Outline maps, to fill in in various ways.

For Drawing

Sticks, to match for color.
Tablets, to match for color.
Tablets, to match for form.
Sticks and tablets, to make designs.
Color tablets, to be matched to name tablets.
Building the spectrum.
Placing adjacent colors of spectrum.
Coloring pictures.
Free work with clay or plasticine.
Work for illustration with clay or plasticine.
Paper folding and cutting.
Paper cutting or tearing, to represent stories, games, occupations.
Cutting figures from wall paper.
Cutting figures from advertising catalogues.

For Miscellaneous Drill

Pictures of weather signals, to be matched to proper explanatory words.
Names of months, to build calendars.
Names of days, to build weeks.
Names of months, to match to names of seasons.
Letters, to build words for spelling drill.
Word tablets, to build scales or intervals as indicated on staff.
Tablets with signatures, to match to music.
Tablets with names of keys, to match to staff exercises.
Cut-up pictures, to put together.
Cards punched with large holes in outlines of objects, to be sewed with coarse lacings.
Stringing kindergarten beads.
Stringing berries, seeds, straws, and other natural objects.

REFERENCES

Many of the books named under Industrial Work furnish suggestions that may help here.

Arnold. Plans for Busy Work. Silver, Burdett & Company.

DESK WORK

ARNOLD. Waymarks for Teachers. Silver, Burdett & Company.
ARNOLD. With Pencil and Pen. Ginn and Company.
COBB. Busy Builders' Book. Ginn and Company.
GEORGE. Teachers' Plan Books. A. Flanagan Company.
Kindergarten supplies of various sorts, including much material mentioned here, may be obtained from the J. L. Hammett Company, Boston; the Milton Bradley Company, Boston; Edward E. Babb and Company, Boston; the Dennison Manufacturing Co., Boston; D. H. Knowlton & Co., Farmington, Maine; and from many like sources. (See the lists given in the chapter on apparatus.)

CHAPTER XXIV

INDUSTRIAL WORK

Justification of such work. Industrial work or handwork has been introduced into school in the belief that the child who is skillful with his hands, while slow in purely mental work, needs a chance, and that the child who is unskillful with his hands needs to acquire a modicum of power in that direction. Manual work trains not only the hands which execute but the brain which directs. It has every excuse for being.

Actual observation proves that much work of this sort may be done with but little loss in such work as has for years formed the school courses. In one school where much industrial work has been done for several years little apparent loss in regular progress has appeared. The children to all appearance cover the ground they have always covered. There may be a leak somewhere, but it does not show. The explanation seems to be that the children work so much more busily in anticipation of extra time for manual industry that much of the former waste of time is eliminated. Little attention is given to whispering, giggling, note writing, or other forms of idleness or mischief. The regular lessons are put through with all speed, and the entire change of occupation furnished by the handwork takes away greatly the element of fatigue. Any teacher who doubts this may recall the effect upon herself

when nervously tired if she busies herself with some light piece of plain sewing or fancywork. The pleasure furnished by the work, together with satisfaction in the results, has its great effect.

Paper and cardboard work. One of the things easiest to be done, and for which material may be secured with least trouble, is paper and cardboard construction. Rich's book called " Cardboard Construction " will suggest to the teacher much work in construction of various boxes, trays, wall pockets, baskets, and things of that sort. Many of these are easy to make and may be attempted by first-grade children, while some of the things may be made by pupils of fifth or sixth grade with profit. The older children may also do cardboard work, and things to be constructed are easily thought of, quite elaborate boxes, blotting pads, portfolios, and booklets resulting. The portfolios, the covers to boxes and booklets, and the corners of the pads may be decorated with colored pencils or with water colors. Picture cutting and mounting may be done, and valentines, Christmas cards, Thanksgiving menus, May baskets, may come at the proper seasons. Toy furniture may be made by all the grades, and the furnishing of dolls' houses brings an absorbing pleasure. For this work with the little children, dictation may be used or the patterns may be drawn for them to cut out. Later they may mark around a pattern ; later still copy one from measurements; and finally, when they are old enough, invent their own patterns.

Material for the work is suggested in Miss Rich's book, but for all practical purposes the teacher may use stiff drawing paper or the so-called studio papers which may

be procured from any school-supply house. Printing establishments will sometimes furnish them more cheaply. Many of the articles may be constructed from common cartridge paper, such as is used for covering walls. It is cheaper and works very well if it is unrolled and pressed flat.

Sewing. Sewing is easily introduced into any school and may vary from very simple plain sewing to embroidery and elaborate fancywork. Plain sewing is usually best. Patton's "Home and School Sewing" and Hapgood's "School Needlework" are very helpful books, and either will insure the teacher's going about things in the right way. Basting, running, gathering, hemming, overcasting, backstitching, are necessary to be taught and may be done through the making of articles calling for the different stitches. The youngest children — sewing should not start before the third year — may practice stitches on canvas or may run along lines drawn with a pencil on soft white cloth, to learn how, but it is better to make *things* as soon as possible. Towels may be hemmed in the common way or by the French hemstitch, or napkin stitch. Small straight aprons may be made, and dolls' clothes attempted. Older children may do more elaborate work, — hemstitching and embroidery stitches, — but plain sewing is what is really best fitted for most school work. It is not a good plan usually to let the girls take their sewing home, for mothers are too prone to pick out the stitches as not satisfactory or at any rate to finish the garment. During the work at school the children should be taught right ways of sewing and not allowed to work awkwardly, even if they seem to produce better results in that way.

It is an excellent idea for the older girls to dress a school doll. This has proved a fascinating employment, and many fine stitches have been set in its accomplishment. The seams are short, and many different kinds of sewing are needed. Much information may be picked up in regard to fitting. The teacher may cut patterns, or they may be bought. The Jenny Wren patterns issued by the *Delineator* are helpful, as are also those recommended by the Goodwin "Course in Sewing." The doll with her wardrobe may usually be disposed of at some fair, and enough realized to cover the expense. The doll should not be too small, which renders the handling of the garments difficult.

The older girls may also be taught the simple crochet stitches and make what they please. The wash cloth is an easy article, and it may be made by whatever stitch one wishes to teach. Plain knitting may be taught also.

Boys should not be given the general sewing, but it would be well to teach them to darn a stocking, put on a patch, and sew on various kinds of buttons, in case of future emergencies; so when such work is in progress all may take part.

Sewing may include, besides that just discussed, work like sewing on burlap or similar material for the construction of needlebooks, napkin rings, and all such articles. The children may also sew braids made from raffia into baskets, frames, hats, mats, and other small articles. In connection with the doll-dressing, hats may be made in this way or from straw braid if that is available. Mats may be sewed from the results of the spool knitting, which furnishes good work for the younger children. The materials being so simple, consisting of a spool with four pins

driven into it and odd bits of yarn that may be found in any darning basket, nearly all children are easily equipped. Reins are the most favored product, but mats are also popular.

Weaving. Weaving is a pleasing form of industrial work. The little children may learn it by means of the common kindergarten mats or similar ones constructed of brown paper. Preparing these last might form handwork for some of the older pupils. Mats for learning may be made also from enamel cloth. The paper mats with bright colors give much pleasure to the children and may be made into cornucopias, May baskets, and other articles, with a little adjustment. The strips should always be wide, and children should not be allowed to do such fine weaving as to try the eyes.

Much weaving may be done on looms constructed of cardboard, having notched edges or holes punched near the edges around or through which the warp may be strung. Such looms may be used for making wash cloths out of cheesecloth cut in bias strips about half an inch wide and frayed or fringed at the edges. On these looms dolls' hammocks may be made also and rugs for dolls' houses. The warp for these may be common white twine. This is more cheaply obtained at the dry-goods stores, where it is used for doing up bundles. Jute may be purchased at stores where twines of different sorts are bought, more cheaply than at the school-supply houses. Holders may be made of jute warp and woof, though a wooden loom is better for these. Wooden looms may be made easily by nailing together four smooth strips of wood and then driving tiny nails along two opposite ends, a quarter of an inch apart.

A wire fastened along each side prevents the mat being pulled in too much. In the same way knitting needles may be run through the cardboard looms to serve the same purpose. The Bartlett loom is a good cardboard loom for weaving little articles of worsted, like caps, capes, hoods, and skirts. This loom may be obtained from the manufacturer, or its equivalent may be easily made. From the J. L. Hammett Company one may get for a dollar samples of all these Bartlett looms, partly strung so as to show the way of working, together with a book telling how to make the various articles. The cost of each thing amounts to two or three cents.

Raffia. Raffia may be employed for many things and is a favorite material. It may be bought very cheaply in the natural colors, and one may dye it for one's self; or it may be purchased already colored. The natural costs about twenty cents a pound and the colored fifty, if purchased from the regular school-supply houses, but it may be bought in natural colors at better terms at the seed stores. The cheapest source that I know is the McHutchison Company, New York, which sells it at a cost not much more than half as great as that usually charged, if several pounds are purchased. Mats and sofa-pillow covers woven of raffia are very pleasing, and the covers are particularly useful for piazzas. Raffia spread smoothly and wound over a pasteboard foundation may serve for constructing picture frames, boxes, needlebook covers, and other attractive objects.

Knotting. Raffia may be used for knotting. Most books on basket work give directions for simple knots with which may be made bags, dolls' hammocks, and other simple

articles. Children who live where such things are useful like to make dip-nets, for which macramé cord is the best material.

Basketry. Perhaps the most interesting manual work, and that furnishing most variety, is basketry; so many different materials may be used in so many different ways. Baskets and mats may be woven from reeds. This is too hard for the fingers of younger children, but the results are so quickly obtained that the older ones are eager for the work. Reeds of different sizes—from one, the finest, to eight and nine—may be bought. Sizes two and three are the most useful. Reeds may be bought so cheaply from F. B. Alexander, West Newton, Massachusetts, that a good-sized basket costs only a few cents. There are many good books on basketry, such as White's "How to Make Baskets" and "More Baskets and How to Make Them."

If it is wished, the reeds may be dyed with Easy Dye before the weaving, or the completed baskets may be dipped. Jap-a-lac applied with a brush gives a pretty finish, as do the wood stains. The children may produce pleasing effects by use of the juices from flower petals and other natural materials, and time is of so little value to young children that they are willing to experiment. Reeds take all dyes easily, but raffia needs to soak overnight in clear warm water, or for an hour or so in strong soda water, before dyeing.

Many other materials may be used for weaving mats and baskets, like rushes, dried grasses and roots, corn husks, and any natural material that has length and is tough when dry. Good wastebaskets and workbaskets may be

made with reeds starting from a wooden base, holes being bored to hold the reeds, which are fastened with glue. Around these uprights any material may be woven.

Sewed baskets take longer than woven ones but are very satisfactory. Reeds, raffia, husks, or grasses are used for the foundation, and the sewing is done with raffia or other similar material. These baskets, once started by aid of the teacher, usually present no difficulties. In starting when reeds form the foundation, the end must be sharpened to a long point and soaked till very pliable. Natural raffia is used most frequently for the sewing, the colored furnishing ornamentation in stripes or figures. The rope foundation is very satisfactory for a sewed basket for younger children. Rope may be bought by the pound at the produce stores. It is soft and pliable and easily worked.

A rather quicker method than sewing is presented in the wound basket, in which results are obtained by winding reeds around reed spokes by means of raffia. There is almost no limit to the work that may be done in basket making, and it is interesting to watch children grow in skill, some children of grammar-school age producing very beautiful results. Linings of silk or silkaline may be added, and these contribute much to the attractiveness of the work.

Chair caning. Chair caning is good work and easily done by grammar-school children. This side of the industrial work seems so practical that parents are immediately interested. Chair cane may be obtained from Alexander's, and directions for caning are given in White's book on basketry. The old seat, cut out, will give assistance in directing. The cane is best used slightly damp. It is held

in place as woven, by small wooden pegs which are thrust into the holes and moved along as needed. The caning goes from back to front, then from side to side, then from back to front again in the same holes, then from side to side to make a mesh, then from corner to corner and from opposite corner to corner, finally being finished by a binding cane, slightly wider. Caning is particularly good work for boys.

Whittling. Whittling may be done by both boys and girls but is preferred by the boys. Larsson's book "Elementary Sloyd and Whittling" gives good suggestions. A kitchen paring knife is better than a boy's pocketknife, which is apt to close unexpectedly. The pupil should be taught to whittle from him instead of towards the body. Soft wood, like pine from the wood pile or an old box and cedar from cigar boxes, furnishes good material. Thread winders, buttons for cupboard doors, key tags, small picture frames, — in shape, oblong, round, or elliptical, — penholders, and many similar things may be made.

Stenciling. Stenciling is good work and is enjoyed by boys and girls. Sofa-pillow covers, bags, and draperies may be constructed. Denim, linen, scrim, or any smooth material may be used. The design is marked on waxed or shellacked paper and cut out carefully. It may also be made on blotting paper, which is good, as it easily absorbs what would spread beyond the desired surface. The paper is then adjusted on the material, and the color applied to the holes of the pattern with a brush. Easy Dye, mixed according to the directions on the tube, may be used, as may common water-color and oil paints. The pupil should use what he can most easily secure.

Modeling. Clay modeling, while remarkably suited for work with little children, may be employed profitably by the older, who may make whatever they feel themselves capable of. An embryo sculptor would probably produce a pretty good statuette. Many animal forms may be made. Most of the children will stop with tiles and vases. An excellent way to make vases is by shaping the clay into a rope and then building it around and upon itself, making it strong and smooth by equal pressure of the fingers from within and without. Children should be trained to make the vases beautiful in shape. They may be dried and then painted if care is taken not to have the colors too wet. Painting directly from the pan of water color is best.

Leather, iron, brass, and other kinds of work. If material can be obtained, work may be done in bent iron, tooled leather, or perforated brass. Sheets of brass, a block of soft wood, an awl, and a design stamped with carbon paper are all that are needed for the latter. Stamped patterns may be bought, but they are expensive. Sheets of brass can be bought cheaply by the pound at hardware stores. Any other manual work for which the child has the means may be done. If he has a jig saw or any tools at home, he should be encouraged to use them. The work should spring out of what is at hand. Many suggestions have been made, in the hope that some may fit.

The dolls' house. It may be well to say an extra word about the dolls' house. A pasteboard box may represent a single room, the front of which is open. A wooden box will serve the same purpose. An elaborate house may be made by means of four sweet-corn boxes. A roof put on gives the attic, and one has kitchen and dining room downstairs,

sleeping room and living room above. Furnishings may be made from cardboard, small reeds, and like material. In one school, such a house was the joint property of nine grades. All contributed to its decoration. The older children designed and made wall papers and carpets. The middle and lower grades did the sewing on curtains and bed fixings. The middle-lower grades also wove draperies and rugs from raveled silkaline, as described with cheesecloth. They wove a hammock for the attic, a pillow to go in it, a rug to go under it. All the younger children helped construct the furniture, which was made of studio paper — white in the sleeping room, green in the living room, gray in the dining room, and brown in the kitchen. All necessary furniture was made, including a kitchen stove and a sink with faucets. The older pupils made the house with some assistance. There was a window in each room and a door between adjoining rooms. Four third-grade boys, clad in long aprons, painted the outside. Dolls of proper size were to occupy it when finished. The idea was of great interest, and many mothers — yes, and fathers, — were dragged in to see the house. It may be gradually refurnished and so prove a further means of training and enjoyment. Work "for something" always produces enthusiasm.

Work in connection with special subjects. Little children take particular pleasure in constructing things appropriate to special days, occupations, or the line of work they are doing. At the February and May patriotic times they may make soldiers' encampments; at Christmas time, Christmas trees and fireplaces; at Thanksgiving, Puritan houses and interiors; at plowing and planting

and harvesting times, the horses, plows, rakes, barrels, and all the proper equipment. When they study the Dutch people, Holland may grace the sand table, its place to be taken later by an Eskimo or Indian village. In this way the children truly live the things they are studying.

Cooking and household economics. Though the time is coming, in the near future, when simple apparatus for cooking will be installed in small schools, at present real cooking lessons are impracticable. Yet even now much may be done by simple talking lessons, in the way of teaching fundamental principles that underlie cooking and usual household operations. Considerable instruction may be given regarding the care of a home. Books like the "Elements of the Theory and Practice of Cookery" will furnish substantial help in these lines.

Gardening. It must not be forgotten that the school gardening belongs under the head of the industrial work. It should be emphasized as much as possible, and suggestions for home work and interest in all the home activities should abound at school.

Time of doing work. Industrial lessons may be given Friday afternoons or at other times where it may conveniently come. In some schools it has been substituted for some of the regular lessons, once a week. Most of this work, in schools with a crowded program, may be taken incidentally — the children working when their other assigned tasks are accomplished. In schools where children bring dinners, the industrial work may occupy part of the noon time, particularly in cold weather. Much may be done at home if it is under school approval. Experience has shown that the time taken at school is hardly missed

in the accomplishment of required mental work. At any rate, since this work is just as valuable and necessary as so-called study, it should be had in school.

Conduct of class. In giving the lessons, one gets on better if not too many work at a time, though a skilled teacher who has carefully planned her work can keep quite a class occupied. If a large class is to work on baskets, for example, it is often better to start a few at a time. Many times older pupils can help younger. Care is needed that the industrial time does not present a bedlam. Proper behavior should be required — a reasonable degree of keeping quiet, a prompt response to requests of teacher, and attention to her directions. Whenever several children need the same directions they should all attend and receive them together, as in that way a great saving of time is obtained. Care should be taken that eyes and nerves are not strained. Some children cannot do weaving or fine work of any kind. Much of the work should be done only a short while at a time, and then some change instituted.

Material. Suggestions for materials have been made, some of which are repeated from the chapter on apparatus. In general, it may be said that nearly all materials for industrial work may be obtained more cheaply at the places where such material is used in bulk or occurs as waste, rather than from school-supply firms. Much material for school industrial work may be got for a song — or without a song, for the asking — if a teacher keeps her eyes open. If materials cost, it has been found wise in many schools for the teacher to get them and then let the children pay for the completed articles. Seldom is the price of any one thing fifteen cents, and usually it is less than seven.

Making a start. A teacher feels herself to be undertaking a great deal in starting industrial work in her school, but, begun simply with the single thing one feels able to do, the work broadens steadily of itself. Suggestions come from all sides, and soon the teacher finds herself feeling confident and showing considerable power in this direction. The joy of the children and the help in discipline make it well worth while for any teacher to put forth considerable effort. Of course, regular courses in cooking, sewing, and manual training are the best, and wherever possible it is hoped they may be had, but even with such courses a place may be found for many of the things here suggested.

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GREER. Food — What It Is and Does. Ginn and Company.

HAPGOOD. School Needlework. Ginn and Company.

HOLLAND. Clay Modelling. Ginn and Company.

LARSSON. Elementary Sloyd and Whittling. Silver, Burdett & Company.

LEAVITT. Examples of Industrial Education. Ginn and Company.

LEDYARD. Primary Manual Work. Milton Bradley Company.

NEWELL. Constructive Work for Schools without Special Equipment. Milton Bradley Company.

PALEN and HENDERSON. What and How. Milton Bradley Company.

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SARGENT. Fine and Industrial Arts in Elementary Schools. Ginn and Company.

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The Delineator. The Butterick Publishing Company.

TODD. Hand-Loom Weaving. Rand, McNally & Company.

TRYBOM and HELLER. Correlated Handwork. J. L. Hammett Company.

WHITE. How to Make Baskets. Doubleday, Page & Company.

WHITE. More Baskets and How to Make Them. Doubleday, Page & Company.

WILLIAMS and FISHER. Elements of the Theory and Practice of Cookery. The Macmillan Company.

WILSON. Handbook of Domestic Science and Household Arts. Whitcomb & Barrows, Boston.

A–B–C Weaving Looms. The A–B–C Weaving Loom Company Toledo, Ohio.

Bartlett Looms. J. L. Hammett Company.

Day's White Paste. Diamond Paste Company, Broadway, New York.

Easy Dye. J. L. Hammett Company.

Jellitac. A powder for making paste. Arthur S. Hoyt, 90 West Broadway, New York.

Leathers, and tools for working them. W. A. Hall, 119 Beach Street, Boston.

Raffia. McHutchison Company, 17 Murray Street, New York.

Reeds. F. B. Alexander, Watertown Street, West Newton, Mass.

For other materials see the lists in the chapter on apparatus.

CHAPTER XXV

SPECIAL EXERCISES

Friday afternoon. For years Friday afternoon has been accepted as a special-exercise time in many schools, particularly the rural one. Nowadays many teachers are putting the special work in here and there through the week instead, either by varying the regular work to include what might be called special or by substituting the specials for regular studies once a week, where they seem to work in well. For our purpose it may be well to retain the old idea of Friday afternoon, though the work may be arranged as suggested above if preferred. Into Friday, then, may go extra work in music or drawing and such nature lessons as cannot be included in the opening exercises or closing talk or in the geography, reading, or language periods. Here may go such of the industrial work or handwork as has not been taken incidentally or in connection with some allied work. This time may include spelling matches, and speaking pieces, and anything else that the teacher likes.

Speaking pieces. The old idea of speaking pieces before the school has many things to recommend it, but it may be a source of friction — as when the big boy does not want to speak. Much of this trouble may be removed by having the exercises less formal and having the preparation made at school. The play element may also be brought in, having one part of the school entertain the rest.

Visitation days. It is well to have public special exercises rather frequently, though these should usually embody work that springs from the regular doings of the school. Sometimes a visitation day should be appointed, to which parents are specially invited. On such days almost the regular work of the school should go on, the object being to let the friends of the children know what happens regularly in the school day. The guests may be invited for morning or afternoon or both, as the teacher sees fit, and the intent should be to increase acquaintance and sympathy between school and home, not to show off in any way. On such days the teacher should have her advance work, with such reviews as come up naturally, and she should really teach and drill just as she usually does. In a rural school it is well occasionally to invite a neighboring school to visit and see a combination of regular and special work. Such hospitality furnishes a strong incentive to good school work.

Entertainments. The other kind of public exercises may preferably come in the afternoon and may consist of a specially prepared entertainment. Invitations and programs may be made by the children. Sometimes the exercises may be general, sometimes for the celebration of a special occasion. If they are general, the children may say the poems and sing the songs they have learned during the term. They may dramatize some of the stories they have already played in school. The teacher or some of the children may tell a story. They may present some little play and several tableaus or illustrated dialogues. Some of their physical exercises may appear — marches with singing, drills, and the like.

While it is often well to have the public exercises general in character, it is a good idea to have exercises for the celebration of special occasions. Washington's and Lincoln's birthdays coming so near each other, a public afternoon might center around their lives. Anything patriotic is suitable for such an occasion. Memorial Day also gives a chance for a patriotic celebration, and Christmas Day furnishes an opportunity for a host of beautiful things. Thanksgiving may include many things relative to the harvest, and much pleasure may arise from representing scenes from the history of the Pilgrims and Puritans. Longfellow, Whittier, and other poets may be given a special entertainment. A special period of history or a country, like Holland or Japan, may furnish the nucleus.

In connection with such exercises there should be speaking by children singly or in groups. All should appear in something outside an exercise shared by the school, though what each child shall do the teacher and circumstances must decide, since some can do one thing better and others another. The point must be to have an arrangement in which no one can justly feel slighted. Certain children may assist in decorating, others may make a welcoming committee, others may pass programs or do something to bring themselves into prominence, and the least forward child should come into the limelight as much as possible. Tact and a kind heart will help the teacher here.

Preparation of material. Long experience has taught that a child who has once learned to speak a piece in a certain way may thereafter be trusted to say it in that way when the occasion arrives, no matter how many times he has been corrected in some part and has said the selection

in the new way. So it is evident that the only wise plan is to teach him rightly at first. Before giving him the selection to work upon by himself, he should be made to read it to the teacher till he easily and naturally reads it with the proper inflections. This may be brought about by the same means that are employed in the reading lesson or it may be secured by imitation, but the first renderings, before the learning begins, should be correct; then the child may usually be relied upon to say it properly.

Dressing up. The children should by all means be encouraged to dress up the schoolroom appropriately and also to array themselves to fit their parts. The desire to masquerade—to make believe—is very strong in most children, and the realistic effect produced fixes the impression strongly. Training for the imagination is furnished also, and the idea has much to commend it. Teachers should be careful, however, not to make too great demands upon the time of parents, and as far as possible the pupils and teacher should make their own preparations. Children will often develop great power in preparing costumes and in training other children for parts. I have in mind an apparently rather stupid girl in a fourth grade who organized and wholly managed several public outside entertainments based upon the exercises that had been held in her school.

Admission entertainments. Usually it is better for school entertainments to be free. Occasionally a slight admission fee may be charged, and the proceeds devoted to school improvements. It is a good plan in such cases for the children to do as much of the business part as possible, in the way of making arrangements, printing and selling

tickets, making programs, and the like. It is often well to have an exhibition of handwork in this connection, with perhaps a sale.

Value of entertainments. Public exercises are of great value in creating interest, enthusiasm, and pride in their school on the part of the children. They also arouse these sentiments in the parents and friends, and form one of the strongest links between teacher and community. They are worth much, but they should not be secured at too great a sacrifice of regular school work.

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Various educational magazines.

CHAPTER XXVI

THE RECITATION

Preparation. The preparation for a lesson should be made by both teacher and pupil. If either is to omit it, it may better be the pupil than the teacher. Indeed, in certain ways of taking a subject, the teacher is the only one who needs formal preparatory work. Preparation by the teacher involves gathering up what she already knows of a subject, reading from the child's textbook and from other books, direct observation of the things which form the subject of the lesson when such observation is possible, thinking out illustrations, — pictures, objects, verbal illustrations, — and getting into line all the material acquired, so that the work may go on logically and vividly. This last includes deciding on manner of presentation and arranging material according to the plan selected.

Ways of conducting recitation. There are many ways of taking up a recitation. The child may study his textbook and give it back to the teacher word for word, in response to questions or topics. It need not be said that this is a poor way. Or he may study his lesson and give it back in his own words, in response to the same stimuli. This is better, but not the best way. The recitation should be a thinking period, containing much discussion, much free interchange of opinions and questions between teacher and pupils. The recitation time should serve as a stimulus

to both. An occasional lesson may be confined to testing the pupil's faithfulness of study and his knowledge, but most recitations should do more. They should at least add much to the child's knowledge. The teacher should tell him many things directly; she should tell him more, indirectly — by showing him that he may find out what he wants to know either from books or direct observation. She may also lead him to new knowledge by calling into his mind the information he has on the subject under discussion, and then leading him by questions to see new relations, new results, and so arrive at new facts. By means of such recitations the child grows broader in knowledge and gets increased power and skill in obtaining knowledge for himself. This last is one of the great aims in education.

Questions and topics needed. For a long time school recitation was carried on by the question and answer method. In a reaction from the great amount of set work that resulted, large use was made of topics. The best recitation work combines both. The topical method, in theory, gives the child a topic and lets him talk about it freely and in his own words. Abuse of the topical method lets a pupil tell regarding a topic the ideas of some one else in the words of some one else. The child is purely passive and need do little thinking or secure little gain in power to express himself. This is not a necessity, but it is of frequent occurrence. The pupil being able to recite without words from the teacher, it follows that a lazy or ineffective teacher soon becomes a mere figurehead. She presents the subject for talk either verbally or through the written topic and, except for that, virtually drops out of the lesson in which she ought to be the most important factor.

By that it is not meant that she ought to do all the work, but she should be the master spirit that produces thought as well as effort on the part of the child. Topics should never serve for more than to start the parts of a lesson. Questions and answers and free discussion should continue it. The pupil should state his own knowledge or opinions in his own words. He has often to gather his opinions from the book, but they should become vividly his before the lesson is through. To recite a lesson through by either questions or topics and then, if time serves, to recite it again is more than absurd.

Oral teaching, or development. Oral teaching, or development work, should be a prominent feature in many recitations. It is particularly suited to young children for a great deal of their work, but it is also extremely helpful with older classes, and no kind of class work is so productive of the habits of inquisitiveness and of thought, to say nothing of the habit of free expression. We may well have this kind of work largely increased in most of our schools of more advanced grades.

All children, even the dullest, acquire a considerable fund of knowledge. In development work, this knowledge is turned about and seen in new relations, and out of this process new knowledge springs through the child's own thought wisely guided by the teacher. This kind of teaching is very useful in connection with geography and science work, but it need not stop there; it will help greatly to have more of it in connection with arithmetic, grammar, history, in fact nearly all subjects. Power to deduce the new from the old is of great service in life; also power to turn one's knowledge upon situations as they come up and get at

the connected truths. In many of our schools we do not have enough recitation work that is not preceded by direct book study of the subject to be handled.

It is often helpful to read over and discuss with a class the advance lesson in a subject — a process productive of thought, though of a different kind from that employed in developing a lesson.

It is often wise to have the lesson dug out by the children without the aid of class discussion first, but too close following of this plan has made children prone to accept stated facts without thought and to feel that books are the only seat of information.

Developing the lesson is a great help in fixing values; finding out what parts are essential, what parts illustrative, what parts minor, what parts ornamental — put in for attraction. Something of this sort may come also in connection with discussing the lesson, but many a child has no idea that in study one needs to find out the gist of the matter and proceed from it to the full development of the subject, — that is, get the skeleton and then find proper covering for it, — a process that is usually followed in a well-given development lesson; so such a lesson trains the children gradually to ability in that direction. It is necessary in all this work to distinguish carefully between reasoning and guessing and to train the child toward the former.

There should be study following the development recitation, for the purpose of fixing the facts taken and for getting additional information. It is not to be supposed that a child's work in school is to cease to be work because he learns things and how to learn more things easily in his classes.

Assignment. Part of each recitation must be given to assigning work for study. This may occupy a minute or two, or in some cases a rather large part of the recitation may be taken for it. In either case the assignment should be clear enough and full enough so that no mistakes can occur. Every pupil should know just what is expected and have an idea of how to go to work. There should be no excuse for argument later as to where the lesson was to begin or leave off or how it was to be done in general. A teacher's indefinite assignment is often responsible for a child's indefinite achievement. This may hold true equally when the assignment is from one topic or page to another or when, the whole lesson being development, the assignment in a way occupies all the recitation period. It is the work of this part of the recitation period to cause the pupil to find out what he is to learn and how he is to go about it; in other words, to bring him face to face with his problem for the next lesson, without which help he will often waste much time.

Questioning. Skill in questioning is greatly needed in development work and in class work of any kind. If a teacher has little power to question, she should observe good teaching and profit by it, and she should practice by thinking out carefully what seems a good way of taking up a lesson. She may select a geography lesson, for example, and make a careful plan with thoughtful questions. She may think what she will ask, what different answers this question may bring, what she will ask if she gets this answer, what if she gets that, what if still another. In this way she may train herself to a habit of questioning well on the spur of the moment.

Questions should be clear, simply worded, and definite. Cloudy, indefinite questions bring hazy answers, given at a venture, or answers far away from what the teacher has in mind. Questions should be given in logical order, that the child may follow the train of thought smoothly and easily and see all along what the teacher is aiming at.

The teacher should be careful not to ask leading questions, those in which the idea of the answer is conveyed ever so slightly. If a pupil does not know, it is right that he should realize it; and if a teacher is to do all the work, it should be done openly and not under pretense that the child is a factor. Questions that may be answered by Yes or No, or other alternate questions, are better avoided. They may be used occasionally, but the habit of asking them is easily formed, and they do not furnish the best form of questioning.

Too simple and unnecessary questions should be omitted. Teachers generally talk too much, and the time taken by such questions may be used to advantage for other things. Questions should probe. The answers should show what knowledge the child really has. Thought, active thought, should be required from the pupils.

Roundabout questions should be avoided and those that use unnecessary words. In general, it is better to use "what," "where," "when," and "how" to start questions rather than to end them. Such beginnings as "and," "now," "well," "who can tell," "what can you say," "what about," are not good. Such are used so often by many teachers as to become absolute mannerisms, and children are quick to notice, to imitate, or to laugh at anything in the teacher which resembles mannerism.

Questions should be given distinctly and not repeated. They should be given before the name of the pupil who is to answer, but the name should follow instantly, with but few exceptions. They are less wearying if given with a falling inflection. The names are better called in this way also.

Distribution. Questions should be well distributed. They should not all go to the good scholars because they can answer better, nor to the poor ones because they need them more. All should have a chance, all should have their time. Some will do more in their time than others, as is the way of the world. The best will be able to do harder things than the poorer scholars, but it is not possible that all should come out at the end of the year knowing the same amount. That would truly be a "lock step" of the graded-school system that might well be complained of. The lower attainment of the slower child may be as great for him as the almost perfect work of the more gifted. The work of any *class* should be of so broad a range as to allow for the uneven equipment of the members.

The teacher's questions should not be aimed at half the class or at a little group or at individuals. All should feel themselves included in whatever is going on. Questions should not go around the class except in a very few cases of drill work — in which much time may be saved and the turns swing along so fast that all have to be alert anyway. Even then the teacher needs to be magnetic and watchful. It is not well to question alphabetically or in any set order. Name cards, too, are dangerous, as one continually gets the square peg in the round hole — the weakest child with all the hardest questions, and the brightest dull

because of insufficient exercise for his powers. Nor should the questions be given for all to answer, as concert work is seldom valuable.

Volunteer answers need to be carefully looked out for. Many children who do not raise hands can answer questions. The teacher gets into the way of working with the active children. Time is lost in waiting for the hands, and —as was said above— prompt questions, without waits for hands or before calling names, save much time. There is no time to spare for waiting for these things, nor before the next question. The questions should be ready, as they usually will be if the teacher knows her subject and has trained herself to think logically from point to point.

Attention a characteristic of a good recitation. A good recitation must command the eager, interested attention of the class. This can never be gained without what we call animation. No shadowy, colorless lesson ever aroused in the pupils the attention that might otherwise have been there. Animation does not mean noise. One does not have to talk every minute, nor in a loud voice. Distinctness and life may be present, though the voice is low. A high-pitched voice defeats its own ends by producing a nervous distraction akin to pain. A mumble, however, seldom goes with animation. Jerky, noisy movements; walking up and down; wringing hands; gesticulating — all such nervous ways are no help in producing the effect that animation and life of the right kind bring.

The lesson needs to be introduced in a way striking enough to at once attract the attention of the children, and attention once gained should be held. Many teachers work along on so dead a level that one may stay many

minutes in the room and have only a general idea of what the teacher is working for. Children come to the recitation with minds filled with thoughts of which the teacher has little idea. The lesson should start in such a way as may serve for a preparation for the work to come. Aimless thoughts — those called up by what the child was just working upon, and any other inadvertent ones — should be driven out and the ideas needed for the comprehension of what is to form the subject of the lesson brought into prominence by a few short preparatory questions. Then the lesson will swing along smoothly.

Variety a help. For the holding of attention, variety is needed — new ways of taking up a subject, little surprises of manner or thought. Much drill work has to be done in any class. In this there is often not enough that is new to hold the attention, and reviews without attention do not establish facts in memory. Here comes in the value of devices which shall produce interested attention and so serve to fix the required thing. Experiments and illustrations, besides helping in many other ways, justify themselves by their effect upon attention.

Other reasons for loss of attention. Since, whenever the teacher loses the attention of her class for any reason, she has to gain it all over, she should beware of losing it. Attention lessens if a child cannot see or cannot hear or is physically annoyed in any way. It vanishes when one goes for any length of time without having anything to do; as when one child works for a large part of a recitation period over a difficult problem or sentence and all the rest of the class sit and presumably attend. One can see the interest and attention waver, see pupil after pupil relax.

Rarely can effort pull them up again. A little to do often, rather than a lot occasionally, is the better way. It is not necessary that a child do all of an exercise himself because it troubles him. He can do a part and hear other pupils finish. Individual work at map or board, prolonged to any length, sets all the class free to gather wool with wandering wits.

If a teacher takes time during a class to help studying children, she may be sure of loss of attention; though of course she should see that the pupils not reciting are controlled and busy during class time.

Sympathy between teacher and class is a great help in holding attention. They simply walk the path together with pleasure, the teacher's interest stimulating the child's.

Responsibility of class. A class should be made to feel a responsibility for attention. The stimulus should not have to come wholly from the teacher. "It is your business to make me learn it and like it" should not be the governing feeling. A class should feel that it is only polite to look attentive; to listen, think, exert itself. Praise is often effective in securing the right attitude, though some children, if much praised, think that they have achieved and cease effort. Usually it is a good means to employ. The child should feel that "I don't know" is not a desirable answer. He should not be ashamed not to know, but he should have made an effort to overcome the condition. Usually he can be made to answer the question by means of further questions, but he should have a personal responsibility for knowing. "I don't know," when it implies "I don't care," should be done away with by some means.

Attitude of class. Though military precision is passing, yet it can do no harm to insist that during a recitation period pupils should sit in a good position. During much of the studying time they lean above the desk, so the class time may restfully maintain a more erect attitude, though it is not necessary for a class to appear as if iron rods supported the backs of the children. Sprawly, slouchy positions are physically harmful, and the attitude of mind produced is not a helpful one. In reciting, pupils should stand erect, free from chair and desk, with hands in an easy position. They should stand still. They should hold their heads up and speak distinctly, answering with decision as though they were sure of things. Answers made with a rising inflection produce an uncertain way of thinking after a time. The answer should be made in such a way that it will be unnecessary to repeat it. Incidentally it may be said that it is not often a good plan for the teacher to make any response to a child's answer. A large number of teachers repeat all or a part of the answer, or say "yes" or "that will do" or "that is sufficient" or "good," or use some other form of response.

Characteristics of a teacher, helping to a good recitation. To make a recitation what it should be, a teacher needs to be resourceful; if one way won't bring it, another must. She has to be level-headed, able to guide the child away from the trivial to the important without suppressing his desire to work and his self-confidence. She needs intuition — power to see where his troubles lie, what his line of thought is — that she may know how to help him. She needs confidence — no fear but that she will accomplish

her aim if she makes effort enough. She must be fully impressed with the idea that pouring in and drawing out are not true education. She must be willing to work. No teacher who does not know her subject matter has a right to demand that the child have a knowledge of his lesson. She who cannot hear the recitation without great use of the textbook should allow the pupil to have his open also. Willingness to work does not apply to study alone; recitations often demand what seems like manual labor. Above all, the teacher needs conscience combined with common sense. She must know when to drill, when to let it alone; when to push a child hard, when to desist. In general, teachers do not drill upon what they are teaching till they have driven things home, but a few overdo it. The recitation is the important work of the school day, the teacher is the most important factor in the recitation; it will stand or fall through her.

Summary. In ordinary recitation work the pupils are dealt with in a mass, and interest and enthusiasm come with the contact of the varying minds. This causes it to be a more efficient factor in education than is the study period. Some recitation periods may well be taken to help the class members individually, but this is work of a different kind and may be classed under the head of study. It need not be considered here. The recitation, as we have been treating it, should test the child's knowledge of the subject; it should teach him new matter, directly in the class or through opening avenues for him to follow. It should arouse his interest, show him how to work, increase his power and skill in working lines. He should come from it feeling that learning counts, that all he can

contribute to class work is appreciated; that all around him lie means of education, and that his may be the joy of using these means.

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CHAPTER XXVII

PLAY

Play in school is allowable at proper times and places. These times and places are in recreation hour and whenever it will make school work easier and more effective.

Teacher should superintend play. The children's plays should be superintended by the teacher, though not usually controlled by her. The superintendence is necessary because without it the plays often become rough, boisterous, and dangerous. Certain children are abused on the playground, either by neglect or by being made a butt for ridicule. Improper conversation often occurs, as well as improper behavior. Quarrels are of frequent happening, and the rights of the neighbors are not respected. The teacher can look out for all these things, teach the children courteous conduct, build up character generally, teach many facts for right living, get closer to the hearts and lives of the children, and learn many ways of approach, through the recreation. From little ideas gleaned on the playground she may often modify her plans of instruction in almost any line.

Teacher should not control play. It is well for the teacher to show new games to the children, but it is a mistake to force her kind of playing upon them when they wish to work out plays for themselves, since from such thinking-out of games they get a great deal of development

in various ways. She may often make a suggestion that will cause them to think in certain lines. She may play with them if they want her to, but she must be careful that the free association of the grounds in no way falls short of dignity on her part. There are ways and ways of playing with children, and the teacher should choose the right way. She should also never play so hard with one set of children as to become unconscious of what the rest are doing.

Kinds of games. Many different kinds of games are needed and will spring up. Some children like to play in the sand, and little hints thrown out by the teacher will cause this play to reproduce many of the schoolroom suggestions. It has already been said that children should ever be encouraged to reproduce in their out-of-school play, both in the school yard and at home, the scenes and events they are studying about. This constructive play is helpful in development as well as in producing interest.

Plays will arise that call for jumping, running, pulling. Wrestling will abound. All these have a part to perform in developing certain muscles, and they will come along about when they are needed for that development. Some of them should be discouraged; as too much tree climbing, or games like snap-the-whip or leapfrog when some of the boys in the game are much stronger than the others, though leapfrog with care may go on all right. Too violent strain on the back should be guarded against, so supervision is needed. Only soft balls should be allowed on the grounds — or bean bags, or a basket ball. Real baseball should be played only in a part of the yard that can be given up to it.

Johnson's "Education by Plays and Games" and Bancroft's book, "Games for Playground, Home, School, and Gymnasium," are excellent for teachers, as they suggest countless games and increase the teacher's knowledge of reasons for playing.

Indoor recess. An out-of-door recess is the best kind, but often recess has to be held indoors. If there is an unused room, it should be given to the children for a recreation room and they should be allowed to play freely and noisily, though not with boisterous roughness. Marching or ring games are good — or tag, or aimless running. Bean-bag games and ball playing of the safe kind may occur.

If recess must be in the schoolroom, games should be instituted that, while reasonably quiet, call for vigorous movement. Games like those of a children's party should be used. Leaping over desks, wrestling, throwing things at random, anything that may prove destructive to furniture or the children's respect for the place, should not be allowed.

Children should take part in recreation. The recreation time should be given up to recreation. Children should not be allowed to work at tasks during the playtime, nor should the teacher work. This is a social time and should be kept so. Neither should the pupils be allowed to sit quietly at the desks. There should be movement.

Noon rest time. In the longer rest time which occurs at noon — if pupils come from a distance and bring dinners or if they habitually come early — a certain amount of industrial work or reading may be done; or the children may play with dolls, or play store as suggested under the

arithmetic work; or in warmer weather much may be done in gardening and nature study. The pupils should not be encouraged to bring dinners if their homes are near enough so that they can reasonably go and come in the given time. If the pupils stay to dinner, the teacher should stay too or see that the children are chaperoned in some way. The iniquity that has existed in some rural schools, partly because of the entire freedom from oversight during the noon hour, is appalling. If both teacher and children bring dinners, many suggestions for table manners may be given under the head of play, by having breakfast, dinner, or tea parties. Incidentally there may be some teaching about proper things to eat, but this calls for great tact in the handling.

Play in connection with regular school work. Much of the regular school work may be eased and illuminated by seizing upon the play element which may be found in it. Nearly all the work of the little children abounds in opportunities for it, and much of that with older pupils. Suggestions have been given, under the proper headings, for games to be used in connection with many school subjects. With the little ones it is frequently active play, with the older the race or contest element is more prominent. Choosing sides, keeping personal tally, trying individually to get things done first, many ideas like these, a skillful teacher will use a great deal, and her skill will appear in thinking out the contests and preventing friction and accusations of unfairness in the execution. "Make believe," "let us pretend," will help too in conquering school work. Discipline is softened and made easy by introduction of a joke, a pretense, a contest, or a game of any sort.

A school life in which play is given its proper value will be a school life fruitful in results and one to be looked back upon with pleasure.

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CHAPTER XXVIII

DISCIPLINE

Reasons for need of discipline. The young teacher's greatest stumbling block, the older teacher's greatest trial, is often the disciplining and controlling of the school. A school needs discipline for many reasons; first, because without it no school can do good work and economize time and effort. It is the wheel grease which makes progress easy. Children, left to themselves in work, are restless, noisy, rude, ineffective in many ways. They waste their own time and that of others. They know this as well as anyone, and an undisciplined school scorns the teacher who permits misbehavior and knows it is having a good time at the expense of valuable things. Yet such is the lack of self-control that children seldom fail to take advantage of opportunities offered.

So a second reason for discipline appears. It is needed that the pupil may be taught the value and power of self-control — just the old question of development, of education. A child needs to learn regard for the rights of others, respect for law and a natural obedience to it — self-restraint. He needs to develop high ideals, with correct habits of behavior. In short, he needs to grow toward beauty of character. School discipline should aim for all these things, not merely to procure momentary obedience, which, though valuable, is minor in comparison with the other results.

Reasons why discipline is difficult. Discipline is made difficult by many causes. First, there is always a strong personal element in it. The way the teacher feels, the way the child feels, both generally and in the particular instance, must always determine the direction and the effect of the discipline.

Second, with the young teacher a misunderstanding of what constitutes good discipline often enters in. The following questions occur to her: How much is necessary noise and movement. How much self-control should be expected from the child? What is really the difference between that which many good teachers allow under the head of freedom, and that which others condemn as pure, unbridled license on the part of the school? What should be suppressed and what allowed? Is the school running away or merely moving with a free, allowable stride?

Third, many troubles in discipline come from a lack of tact — from failure to comprehend the child's motives and to see at once how to get to work with him, and from the doing of the wrong thing, which antagonizes him.

Fourth, many more troubles come from failure to organize the work in such a way that the pupils must keep busy constantly and without friction.

Fifth, often a teacher fails to discipline because she is afraid of incurring the dislike of the children or of their parents, or from a grounded opinion that she must govern by love and respect or other motives that fail to appeal to the children she has in hand.

Lastly — often, indeed — the teacher does not control the pupils because she has no idea of what to do in the given case. She sees the trouble but knows not how to remedy it.

So, from one cause and another, we have a large number of undisciplined or somewhat badly disciplined schools, a large number of teachers who are mildly tortured by the controlling of their schools, and a large number of children who are not being rightly handled. Each of the above causes for poorly controlled schools will be considered in this discussion.

What constitutes good order. Perhaps the first thing for a teacher to do is to find out what constitutes disorder. A school may be said to be out of order when the conditions in it are such that the children are disturbing each other, preventing the best work being done in the easiest and most effective way. A school is out of the teacher's control when she feels that she cannot at will produce the conditions that she desires. It does not at all follow that it must remain that way.

Noise a condition of disorder. Many things may disturb so that children cannot work. Noise is one, so a noisy school is not commendable. If pupils are able to work in it, it still remains true that they are subjected to a nerve strain such as comes from working in the midst of noise anywhere. Some children simply cannot work in a hubbub. A quiet school does not mean a dead school, not one where cast-iron order or absolute lack of movement prevails. A proper working noise should be allowed; the hum of labor is not objectionable, but one would gladly lessen the sound of labor's hum in a cotton mill or a boiler shop if it were possible, and the schoolroom differs from many workshops in that its labor is largely mental and so more greatly in need of quiet. A school should be as still as is compatible with good earnest work and the comfort of the pupils.

Training in being quiet is not necessarily an injury. To always move the lips when one reads is rather a hindrance sometimes; to whisper or talk aloud when the spirit moves is often a social rudeness. There is no need that boys should always step as heavily as they can, nor be moving all the time, nor go with an uproar when they do move. To be able to wait a suitable time for getting things is often an advantage.

Movement favorable to disorder. Children's work is disturbed by anything that distracts the attention. Moving things always demand attention, so, in a schoolroom, unnecessary movement should be avoided. Any necessary moving is of course legitimate, but the law of attention and movement being absolute, it follows that the movements should be not only quiet and reasonably infrequent but performed in the most natural way. The pupil expects the teacher to be moving, so it is often better that she be the one to move. Instead of having every child in a class tumble out of his seat at a certain stage in the work and shuffle down the aisle to get a piece of paper, it were better that paper enough be given out at first or that the teacher keep an eye for needs and remedy the difficulty. This does not at all mean that pupils may not leave their places ever or get things for themselves. It does mean that usually the teacher should know the occasion of the moving and reduce it to a minimum of disturbance. Going for all one needs with no demand for foresight — traveling to the wastebasket, the water-pail or faucet, the supply case — soon produces a tendency to spend one's time upon the road rather than in work. It is wasteful as well as disturbing, and it opens avenues for trouble in many ways.

Usually it is better to have no communication or leaving of desks except for well-understood reasons and then nearly always after receiving permission through some signal. Some experienced teachers allow pupils to move around without permission, but the young teacher is safer if she knows just why they are going. Even with the older it often results in much aimless wandering, waste of time, and confusion. Many things that may be permitted in a small school or by an experienced teacher are unsafe to be attempted with larger schools or by one who has taught little. It is better to be rather exacting till one's judgment and power are trained, then one may be more liberal.

Industry, obedience, politeness, signs of well-ordered school. A well-ordered school is not only moderately quiet and reasonably stationary, but it is busy. It works willingly and almost constantly. It shows a desire to achieve. If a school is well controlled, its members are polite, obedient, cheerful. No teacher may feel that her school is under perfect control when the children are outwardly rude in look or action, or disobedient either directly or by a return to the forbidden as soon as her glance is removed. Disputes as to what he was told to do, how far the lesson was assigned, what was taken yesterday, and things of that sort, bear the stamp of rudeness most decidedly — to say nothing of the suggestion of indefiniteness in the teacher's procedures.

Understanding by teacher of what constitutes disorder absolutely necessary for good discipline. Having decided what good order is — and that must be done finally, not by what has been said here but by thought, observation, and common sense — the next thing is to think how to meet

the difficulties; but I would emphasize here that to know what constitutes a well-ordered school is a prime requisite for a teacher. Many times I have been assured by students who have had some experience that they had no trouble in discipline, when their superintendents have reported them as exceedingly weak. They evidently had not the right idea of what to demand, being satisfied with conditions far short of the best. A superintendent, who had been driven nearly to distraction during a visit to one of his schools, asked the teacher if it did not make her nervous to have the children so restless. She replied that she did not notice it in the slightest degree. Her ideals were not high, and he was neglecting his duties in the direction of raising them, for he made no further comment.

Proper organization of work a help in discipline. If school work is properly and carefully arranged, it greatly simplifies the problem of discipline. Such organization calls for thought, common sense, executive ability, and hard work. A teacher should give the pupils all the work they can do, see that they do it, and endeavor to arouse a wish to do it. Keeping busy is one of the great secrets of a good school. A teacher can arrange for the distribution and collection of material, see that the books and other things in the desks are kept in order — in many such ways simplify the work and economize on time and confusion. Such simple things as planning which side of a seat a child shall get out of, whether a class shall pass forward or toward the back of the room, or whether it shall pass at all, have a great effect on the general appearance of a class and its tendency to good behavior. If some of the children hold objects to be collected on the right

side of the desk while others hold them on the left, if some fail to hold them at all, if certain books are left behind upon the shelf, — being out of proper place ; — confusion is caused and a general loss of respect for law and order.

If things to be used in the work are made ready beforehand, it contributes much toward easy management. If a teacher has her plans for the day carefully thought out, much is gained in general lack of friction and of need to find things to fill in gaps. All of these arrangements decrease the restlessness and the idle times which serve for mischief and for producing the general loss of a feeling of responsibility.

The personal element a large factor. Since the way the teacher feels must determine her attitude toward things, it becomes her duty to keep herself in a state of mind and body which will render her normal toward disturbing elements. If a teacher was up too late the night before, for the purpose either of correcting papers or of attending a whist party, she cannot look at things reasonably. If she suffers from indigestion, nerve strain, headache, she cannot meet difficulties cheerfully and so deprive them of half their terrors. I have known a pair of new shoes to render a person an unfit judge of those around her, and there are people who can see nothing in the world worth trying for if they happen to be not quite warm enough to be comfortable. Little things these are, but many a teacher has had a hard day just because of some small physical discomfort that started her off wrongly in the morning. It is almost sure to be the case that when everything goes wrong through the day the fault is the teacher's. It is perfectly possible, usually, for anyone to

regard her physical condition and temper it to her needs. Incidentally it may be stated that when the teacher knows that the children have been overstrained or are overexcited in any way she should be specially careful to keep well herself.

Then, many teachers will freely permit liberties to some children, while unable to endure the slightest infringement from others. We are so constituted that some people seem to get on our nerves, while others never rub us the wrong way. Because of this, we are often unfair and hasty in our judgments — overlooking when we should take note of offenses and nagging, frowning, reproving, when we should be silent or smile or stimulate This state of affairs is pretty common with the best of us, though it may not frequently be carried to an extent where great harm is done.

Tact an essential element. Tactless teachers often precipitate troubles. It is safe not to be in too great a hurry. Difficulties do not always have to be settled on the instant, and waiting often changes the tension of the whole situation. This does not mean that real demands for prompt action should not be promptly met. They should, but deliberate action is often better. Remoteness of punishment may sometimes diminish its efficacy, but the wise teacher will be sure the child makes proper connections between the punishment and the offense — the school also, if it is needed by the school. Troubles should be avoided when possible. Many a teacher has difficulties because her school has been running so smoothly that she takes a sudden notion that she must have been lax. Many another reads trouble into harmless acts. Others quite unintentionally

goad on to destruction a child who was headed wrongly in the morning and who needed a little ignoring or a little smoothing down.

Tact means sympathy and observation. Some people possess it, some wholly lack it, most are able to acquire it to a degree. A teacher's whole personality may suggest it. Each child may be made to feel that he is to get his due of kind treatment. The best way to get tact, perhaps, is to study the children, observe what things seem to appeal to them, to what motives they most easily yield, what the home conditions may tend to produce. Everything a teacher can find out about a pupil will help in knowing how to handle him. Study of children does away with the idea that they should be treated alike. They are not alike, they should be treated accordingly. They should be made to understand that they will be used fairly, but that they will not all get the same thing always. It is possible to make children comprehend this idea. If it be well "rubbed in" and they be made to know that because they do not see penalties and rewards administered it is not to be concluded that they are not given, much of the feeling of unfairness that exists and has its effect upon a school may be done away with. Learning to know the pupils, keeping the golden rule, and maintaining her own dignity and self-respect — all will help a teacher to tactfulness and power in discipline.

Popularity. Keeping these things in mind, a teacher should go ahead and do what seems to her to be right and necessary, regardless of whether she is popular with children or parents. She must do her best without fear; yet if a teacher feels her whole school against her, she should

hesitate to advance till she has again examined her ground and made sure she is right and has gone about matters tactfully. If she does her very best and thinks no more about it, the popularity will probably come.

Love and respect. Many a young teacher has gone martyrlike to her doom because she had certain theories about teaching and felt she must live up to them. One of the greatest of these has been the feeling that she must govern by love and respect only. There is no possible reason why these feelings should not form a chief factor in the problem of discipline, but frequently the child has no immediate reason to love a teacher, and the only reason for his deeming her worthy of respect is that she is placed in a position of authority over him. During the first few weeks, or sometimes after a waiting lull, or during the first hours of the day if she is a substitute, the pupil ascertains by personal experiment how deserving she is of either. Holding her ground during this time by whatever means she finds most effective, she may firmly establish both love and respect and thereafter govern by means of them. The many little things she allows or prevents will do more to decide the question than will a few big ones. Theories are all right, but they should be laid aside when necessary, at the call of common sense, and modified when occasion demands.

Not knowing what to do. The teacher who sees the mischief but does not know what to do, should remember that it is not the thing that constitutes the penalty but the certainty of there being a penalty that makes for good behavior. It often makes little difference what the teacher does, so long as she does something. One failure to recognize disobedience and deal with it will bring future trouble.

Discipline should be quiet. Discipline should be as quiet as may be. Offenses should not be overlooked, but they should be prevented when possible. It is often easy to see that something is afoot that will make trouble in a minute or two. A word, a look, or some quiet means may nip the trouble in the bud. Means and occasions for offenses should be removed whenever possible. When offenses occur they should be dealt with without uproar. There is too much talking about behavior. Scolding is valueless usually, though once in a great while — when one is not intending to do much besides — the punishment may be given with the tongue. One usually says too much; a few vigorous words or a few of quiet contempt will go further than much wrath. Constant nagging would drive anyone to desperation; telling once should be enough and generally will be if the teacher watches to see that all suggestions are obeyed. General calls for order are of little good. To wait a minute — a minute with eyes closed is interminably long — is better. It is a mistake to let one's discipline always show how the wheels go round. That school is best disciplined in which things go right, but no one seems to be thinking about discipline.

There is usually someone who is making the trouble. The teacher should find the ringleaders and deal with them, nearly always quietly, as far as possible privately. To go and speak to a child is far better than to call to him, for many reasons — among which are the tendency of children to imitation and the fact that no one knows what the teacher says to the child. The idea should be cultivated with each pupil that he is responsible for himself and need not concern himself with the others except to

set them a good example and to do nothing to disturb them. This last idea may be so well developed that little need for discipline will arise. Often the teacher, by calling attention to an offense, opens an avenue of offense to the other pupils. This is equally true when the discipline largely takes the tone of forbidding to do things. Children are very imitative, very open to unconscious suggestion. It is better to tell what to *do*.

Pupil government. Many teachers use successfully the idea of pupil government. This cannot be worked well with younger children. In using it with older ones, the teacher should remember that she is still at the head of the government. The responsibility of school control must always lie with the teacher, but she may be able to do it best by influencing the children to control themselves. It is a matter for careful handling. The Brownlee "System of Child Training" gives some good suggestions in this line.

Motives for misbehavior should be found. The reasons for disorder should be sought. To control a school well, it is necessary for the teacher to discover the child's motives. Much apparent heedlessness and disorder arise from defects of sight and hearing or other physical troubles. One would always be more sympathetic if she knew these to be the cause. An uncomfortable child is hardly ever good. Again, much disorder is caused merely by ignorance of good manners. Teachers need to be particular in corridor and yard to keep the pupils mannerly and free from the boisterous rudeness that comes without intent but that frequently spills over into the schoolroom and at any rate may make the child a nuisance in general company. A great deal of trouble arises from an overflow

of animal spirits. Sympathy and giving more work to do will meet this. Often the seating arrangements are bad, and breaking-up of the "ring" will straighten the trouble immediately. Much open disorder comes from the child's getting so absorbed in what he is bent upon that he becomes unconscious of the teacher's presence, a case of maximum attention which produces apparently open and reckless misbehavior.

A pupil's wrongdoing sometimes comes from obstinacy. For one to be born obstinate is very unfortunate. Frequently the child is as unhappy as he is making others. He would stop balking if he were able. He should be managed by kindness, by overlooking many occasions for friction. If trouble comes, one should handle him as one would a balky horse—divert his attention, ignore him, give him a choice of things to do, gently push him along, sometimes treat him to a surprise. Collisions with an obstinate, sulky child should always be avoided. Usually the teacher's self-respect is not suffering as much as she thinks. If the collision has to come, as come sometimes it must, the teacher should be sure to come off victor.

One should not be too prone to discover signs of offense. Often what seems like rudeness is bashfulness, self-consciousness, embarrassment. Yet it is well to remember that looks and acts can express rudeness as well as can words, and many a child is allowed a veiled insolence for weeks, which must needs produce a bad effect upon him and the school. The teacher should demand politeness always and, on the other hand, should herself never fail of courtesy even in the most trying moments. Many little offenses are often worse than one large one, being

fully as bad in intention and much less easy to handle. An occasional child seems to plan to keep just inside the border line and never seems to do the one thing which would deserve marked attention. He should be jerked one way or the other with decision, should hear the list of his offenses in a bunch and either reform or receive his deserts. On the other hand, a teacher sometimes seems to be obsessed over the small misdemeanors of some particular child. It would be well to seat him behind her for a while, where she need not see him constantly, or else behind the school so she may disregard him without their knowing it.

Mode of administering punishment. Punishment should be given in a way to preserve the pupil's self-respect, except in a few cases where a sense of humiliation is desirable. The teacher's self-respect should be maintained also, and many degrading punishments are to be avoided for their effect upon the teacher more than upon the child. Punishment in wrath must needs lower the teacher's feeling of respect for her own efficiency. Punishments should be given impersonally and sympathetically, regretfully as to the need but without maudlin display of sentiment. They should be administered in such a way as to prevent a recurrence of the offense, but to prevent it largely through raised ideals.

Kinds of punishments. It is difficult to state what particular punishments should be employed. Those that might injure a child physically should never be practiced. Slapping of faces, boxing of ears, shutting in dark closets, oversevere shakings or whippings, all such things, a teacher should scorn to use.

Isolation is often very effective. It gives a child time to cool off, to get another point of view. Much trouble comes from nervousness, and the stimulus of an audience being removed, the child is calmed and quieted. The school has a chance to recover its equilibrium, as does also the teacher. Isolation should not usually be accompanied by disgrace and should not be too long continued.

Putting on honor will work with some pupils when all other means fail. Sending home is sometimes effective, but often produces an unpleasant state of feeling. If the parent can be made to understand the exact condition of affairs by means of a private note, it sometimes works well. Punishing like with like is a good way. Having the child do till tired what he did for fun, in the hands of some teachers, makes an almost ideal form of punishment.

Whipping may be done when the teacher is assured that it is what the child needs. It should be used not because it is the easiest way but because it seems the best thing. It is so easy a mode of punishment that there is danger that it will too often seem the best, so one needs to be careful about employing it. If the teacher is assured that it is the best thing, it should be done with dignity and dispatch. It should nearly always be performed in private, as should most punishments. Once in a great while it is well for a school to see what goes on, as a lesson, but the effect of such things upon nervous children is bad, and it is not desirable to satisfy too closely the inquisitiveness of others.

Right motives should be appealed to. Many too commonly used punishments appeal only to the child's fear or to his sense of shame. Fear is the lowest of all

motives, and shame, unless carefully handled, may be little higher. It is far better that a pupil do right through ambition, through love, admiration, or respect for the teacher, or through a large desire to do right than through poorer motives.

Rational obedience is by far the best. A child should know why he is expected to do certain things, why he is punished or praised. It is not always well to defer obedience for explanations however. Explanations may accompany directions or may come afterwards or sometimes do not need to be given at all. Confidence in his teacher should be one of the greatest reasons for the obedience of a pupil. Rational obedience as far as possible, but obedience anyway; obedience through the highest motives possible, but obedience through a low motive if necessary while a higher is being established; obedience at any rate — this should be the teacher's creed, otherwise she may do serious injury to the child. Uplifting the tone of the school by talks and making the pupils feel that good order of the school is necessary for *them*, that it lies within their power and should be accomplished by them, that they are responsible for it, will go far to produce a proper attitude. It should be "we" and not "I" or "you" in connection with all school affairs.

The aim of discipline. The aim of all punishment and discipline should be self-control, power for self-governing, development of character; consequently the means employed must be as many as there are children, as changing as the needs of the school.

The teacher should remember that because school government aims at high things all superintendents and

committees want a well-governed school. She should remember also that it is the spirit and not the body that governs, so she should increase her own self-confidence. She should expect to be obeyed. She should grow able to manage her school for herself. She may indeed call upon superintendent and principal when their help is necessary, she may better call upon them than have her school run wild, but she should feel ever unsatisfied till she herself is able to govern her school.

Influence of teacher's character. The teacher's character is the greatest moving power. What she is and the spirit she establishes will govern or misgovern her pupils. If she cannot control herself, she will not control the children. If public opinion condemns her, if — as has been suggested before — she is known and discussed by all the street-corner loafers, if she is not a quiet or an active power for good, she cannot make of her school what she otherwise would.

Good discipline cannot end with the schoolroom door. The teacher's influence must go with the child and uplift and support him as will that of a worthy mother. The teacher's example and precept must work quietly and steadily through all a child's waking hours, whether spent in work or play, whether in school or home or elsewhere.

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CHAPTER XXIX

CONCLUSION

Going away. When the time comes for the term to end and for the teacher to depart, she should not hurry in the doing so. It may be true that she is homesick, having been away from home perhaps for the first long absence. Her surroundings may not have been very congenial, she is undoubtedly tired, and she has probably done all she will be paid for; yet in spite of all these facts, it is better to put things to rights without undue haste. It is not well for a teacher to close a term at three o'clock and take a four o'clock train, or, as sometimes happens, to supposedly close at four and take a three o'clock train. School should be ended with due decorum, with no signs of haste or neglect. Children are too easily taught the idea that the last of the term amounts to nothing.

The register should be carefully made out, and such additional information as one would have been glad of herself should be left for the next teacher. The books and all other apparatus should be put in order, the boards cleaned, the flowers and other litter thrown away — in short, there should be left behind a place that has been swept and put in absolute order. As the teacher has tried to make the school a home, so let her leave it as she would leave her own home when going away for a visit. Let her extend the idea to her boarding place and leave

her room in good condition. Then when everything is right she may go away with a light heart, a consciousness of duty done, a wholesome regret for whatsoever mistakes she may have made, and a new hope and determination for the future.

Coming back. Let us hope that in many cases this future may return her to the same school, to be heartily greeted in the neighborhood, to rejoice over the orderly schoolroom, to be put in mind of forgotten things by her own register and other records, to enlarge the resources of the school equipment, and to carry on all those good plans which she was wise enough to start, regardless of whether the next teacher would continue them. Even to a rural school, perhaps above all to a rural school, it is well that there should be several of these returns. Teaching in the country is not without great advantages, since going to school is the business of the children and they are often without the great social distractions of a village or city. Nature presents her most attractive side. True, the salary is smaller, but the temptations to spend are fewer. The teacher may occupy a far more important place than in a larger community, and the opportunities for doing good are great.

What the book has tried to teach. Lest it seem to the teacher that too much has been required of her in the foregoing chapters, it may be wise to take a backward glance and do a little summing-up. She has been asked to give less work in arithmetic and to make it appeal to the senses and to reasoning; to make the language work include abundant expression of thought with correction of its expression and a contribution to material for thought

by means of poems, stories, and pictures; to make the reading intelligent and about something worth while; to make of geography and history thought-subjects rather than mere verbatim recitations; to open the eyes of the children to the beauties of nature and their ears to harmony of sound; to employ drawing as a handmaid to other work; to train somewhat the pupil who is skillful with his hands and to start another who is not skillful upon the road to skill; to make the child physically comfortable, mentally efficient, and morally strong; to consider the need of tools as great in the training of children as in the manufacture of shoes, bicycles, or horserakes; to make the schoolroom as pleasant as the ordinary home; to make her behavior that of the modest, virtuous woman who is above reproach.

It all calls for work, thought, and self-denial. What business ever failed to need these? She who expects to teach without them, who has chosen teaching as an easy occupation, may well be discouraged and retreat as early as possible. She who is willing to give of herself largely may find their accomplishment far easier than she thinks and her rewards greater than can be known by any other than herself.

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